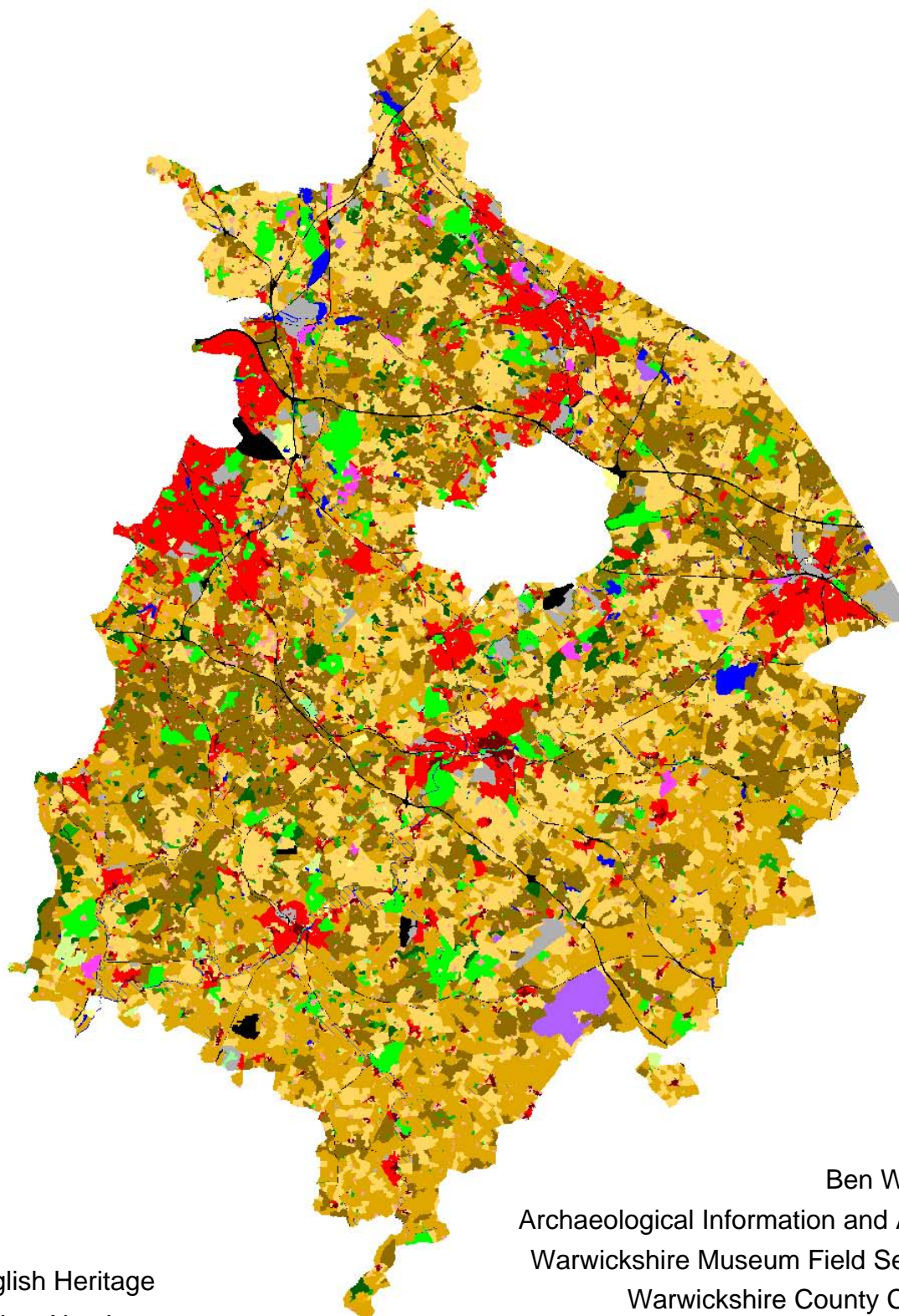


Warwickshire Historic Landscape Characterisation Project



English Heritage

Project Number:

3870 MAIN

Ben Wallace
Archaeological Information and Advice
Warwickshire Museum Field Services
Warwickshire County Council

June 2010

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Acknowledgments

Thanks first of all should go to English Heritage for commissioning and funding this project, in particular the Characterisation Team, with special mention to Dave Went and Peter Herring who were the project overseers and offered much helpful advice and comments at all stages of the project.

Thanks also to Jonathan Parkhouse the County Archaeologist at Warwickshire County Council who managed this project and kept it on the straight and narrow.

Also to Emma Jones the former Historic Environment Record Officer at Warwickshire County Council who was invaluable in her support.

Other neighbouring counties and HLC officers offered much data and advice to this project including John Robinson (Leicestershire), Andy Wigley (Shropshire), Debbie Langley (Black Country/Staffordshire), Mike Hodder (Birmingham), Anna Wilson (Coventry) and David Green (Buckinghamshire)

Finally the author would like to thank his wife for patiently putting up with all those polygons!

Abbreviations

AONB	Area of Outstanding Natural Beauty
BGS	British Geological Survey
CAA	Conservation Area Appraisal
DM	Defence Munitions
EA	Environment Agency
EH	English Heritage
ELC	European Landscape Convention
ELS	Entry Level Scheme
EUS	Extensive Urban Survey
FEP	Farm Environment Plan
GI	Green Infrastructure
GIS	Geographic Information System
HBA	Habitat Biodiversity Audit
HECA	Historic Environment Character Areas
HECZ	Historic Environment Character Zones
HER	Historic Environment Record
HLC	Historic Landscape Character
HLS	Higher Level Scheme
JCA	Join Character Areas
LPA	Local Planning Authority
LDF	Local Development Framework
LDU	Landscape Description Unit
MB	Metropolitan Borough
MSRG	Medieval Settlement Research Group
NBBC	Nuneaton and Bedworth Borough Council
NCA	National Character Areas
NE	Natural England
NMP	National Mapping Programme
NWDC	North Warwickshire District Council
OD	Ordnance Datum

PAI	Positional Accuracy Improvement
PPS	Planning Policy Statement
RAF	Royal Air Force
RBC	Rugby Borough Council
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
SDC	Stratford-on-Avon District Council
SHINE	Selected Heritage Inventory for Natural England
SOAs	Super Output Areas
SMBC	Solihull Metropolitan Borough Council
OS	Ordnance Survey
WCC	Warwickshire County Council
WDC	Warwick District Council
WLG	Warwickshire Landscape Guidelines
WOM	Woodland Opportunity Map
WOMBAT	Warwickshire Online Mapping Browser and Toolkit
WWT	Warwickshire Wildlife Trust

Executive Summary

This report summarises the results of the Warwickshire Historic Landscape Characterisation Project carried out by Warwickshire County Council Museum Field Services between May 2006 and March 2010.

The project forms part of a national programme of Historic Landscape Characterisation funded and administered by English Heritage over the last 15 years. For the most part they have been undertaken by Local Authority based Historic Environment Services, covering individual counties or similar sized units. They aim to achieve an archaeologist's understanding of the historic and cultural origins and development of the present day landscape through a desk-based programme of digital mapping, description and analysis, by the identification of the physical remains visible within the landscape that demonstrate the processes by which it has reached its present form.

Like the other members of the family of landscape characterisation studies to which it belongs, HLC provides a broad-brush overview of complex aspects of the historic environment in order to provide new and wide-ranging information for conservation, management and development decisions. The objective of HLC is to promote better management and understanding of the historic landscape resource, and of the accommodation of continued change within it, and to establish an integrated approach to its sustainable management in partnership with other organisations.

The Warwickshire HLC uses a complex database with linked GIS mapping capability to record discrete parcels of individual historic landscape character. Sources such as historic maps, aerial photographs and other types of information were used to assign each area to one of a number of HLC Types.

This report summarises the results of detailed analysis of the HLC material including analysis at a county and local planning authority level. A range of practical applications of the dataset are outlined along with recommendations for the future of HLC in Warwickshire.

The Warwickshire HLC helps us understand an essential aspect of the county; there is no doubt that it has great potential to inform management, conservation and understanding at local, county, regional and national levels.

The results of the Warwickshire HLC project have been integrated into the Warwickshire and Solihull Historic Environment Records and as such the information and data is available to anyone wishing to know more about the Historic Landscape Character in their area.

This report is also available online at: www.warwickshire.gov.uk/hlc

Chapter 1 - Introduction

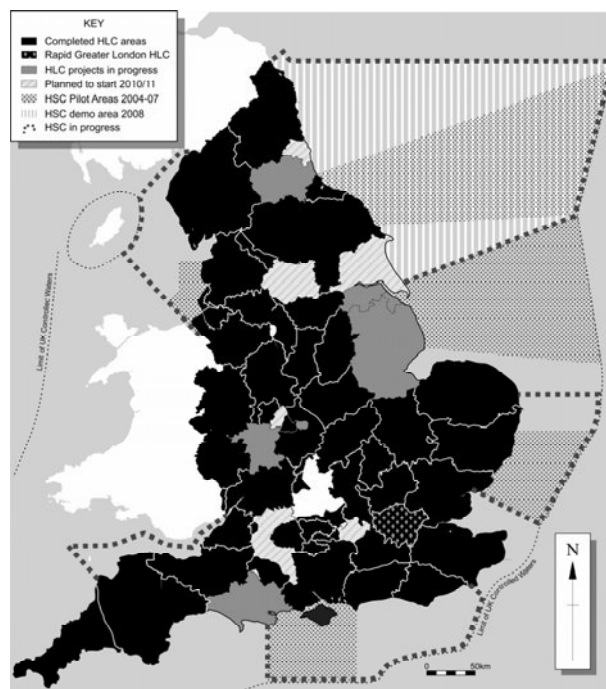
Historic Landscape Characterisation

In September 1991, the UK Government White Paper 'This Common Inheritance' suggested that English Heritage prepare a list of landscapes of historic importance in England for the purposes of conserving and managing England's 'historic landscapes'. However, it was concluded, after a number of pilot projects aimed at assessing historic landscapes, that a selective register would not meet the conservation needs of the historic landscape in its widest sense. Instead English Heritage turned to characterisation as a way of better understanding and managing historic landscape.

Over the past twenty years the concept of 'characterisation' has become accepted as the preferred approach to landscape management. The idea of 'character' for the historic environment was first mentioned in the 1967 Conservation Area legislation. Since then it has been endorsed by a number of national policies such as *PPG7* (now *PPS7*) and *PPG15* (now *PPS5*), and also at a regional and local level, often being referenced in Regional Spatial Strategies and Local Development Frameworks.

HLC has been endorsed by the government in *A Force For Our Future* (2001) as an emerging tool for managing change in the historic environment. It also has relevance in the context of the *European Landscape Convention* (ELC), which came into force in the UK in 2007. The ELC supports the holistic character-based approach to landscape defining it as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (ELC 2000).

English Heritage started a national programme of Historic Landscape Characterisation in 1994 with the first county-wide HLC in Cornwall. Currently there is almost complete national coverage of HLCs in England with around 90% of the country having carried out or in the process of carrying out an HLC (see map below).



Map of HLC Progress in England (Drawn by Vince Griffin, © English Heritage 2010)

In the West Midlands region most areas are covered by HLC (see table below); only Birmingham and parts of Coventry lack coverage although Birmingham is due to start an HLC project in 2010 and Coventry are looking to carry out characterisation for the urban area.

Once all the HLCs are complete in the West Midlands the next process would be to develop some form of Regional HLC. This will help provide an overview of the historic landscape at an appropriate scale for inclusion in outputs such as the Regional Spatial Strategy.

HLC Projects in the West Midlands Region:

Area	Status (as of March 2010)
Herefordshire	Complete
Warwickshire (including Solihull, part of Coventry and part of Birmingham)	Complete
Black Country (Dudley, Sandwell, Walsall and Wolverhampton)	Mapping complete, some reports complete, project due to finish in Spring 2010
Shropshire	Complete
Staffordshire	Complete, report yet to be produced
Worcestershire	Characterisation in progress
Birmingham	Due to commence in 2010
Coventry	Rural north western part covered by Warwickshire HLC. Considering a characterisation project for the remaining predominantly urban area.

HLC works at a landscape scale. It recognises that the present day landscape is a human construction. The fabric of the land that individuals and groups use to create their own notion of landscape is the product of thousands of years of human activity, although much of what remains to be seen today may be very recent, and has undergone successive periods of change and modification.

All landscape within England can be said to be historic – there are no areas, even apparently ‘natural’ ones, which humans have not used or affected. The term ‘historic landscape’ encompasses not just archaeological monuments and historic sites and buildings, but also roads and open spaces, fields, hedgerows, woodland and other habitats.

Over the past 15 years, HLC has evolved; there have been several ‘waves’ of the programme, each project developing and adapting the method to its own area. After the first county-wide HLC in Cornwall, the methodology developed to include more sophisticated databases and GIS with the most recent approaches defining HLC areas on a much more detailed level than was first conceived. This has been especially true in more urban areas where developments of the methodology in Liverpool and The Black Country have produced datasets and maps showing a huge variety of character types at quite a fine level.

Despite this growing sophistication of GIS, HLC is still a relatively generalised characterisation designed to serve primarily as a resource management tool. The overall characterisation of the country provides an inclusive, comprehensive

framework for conservation and management – there are no ‘white areas’ on a map where the historical dimension is omitted. This broad approach is repeatable and updatable and the framework produced enables more detailed assessment to be carried out when required.

HLC has helped to redefine how the historic environment is perceived and managed, allowing a shift from the traditional designation of sites, to an appreciation of both the landscape context of sites, as well as the value of the historic landscape as a whole.

The Warwickshire HLC Project

Location and Description of the Project Area

The project area (see map) consists of the following four components:

The present day administrative county of Warwickshire

There are five Local Planning Authorities within this area: North Warwickshire Borough, Nuneaton and Bedworth Borough, Rugby Borough, Warwick District and Stratford-upon-Avon district. The small part of the County lying within the Cotswolds AONB was the subject of an earlier HLC programme (Hoyle 1999) and was therefore excluded from the Warwickshire HLC Project.

The administrative area of the Metropolitan Borough of Solihull

This was historically part of Warwickshire until the 1974 local government re-organisation. Archaeological planning advice is provided to Solihull MBC by Warwickshire Museum Services, who also maintain the Solihull Historic Environment Record.

The North Western rural part of Coventry City Council

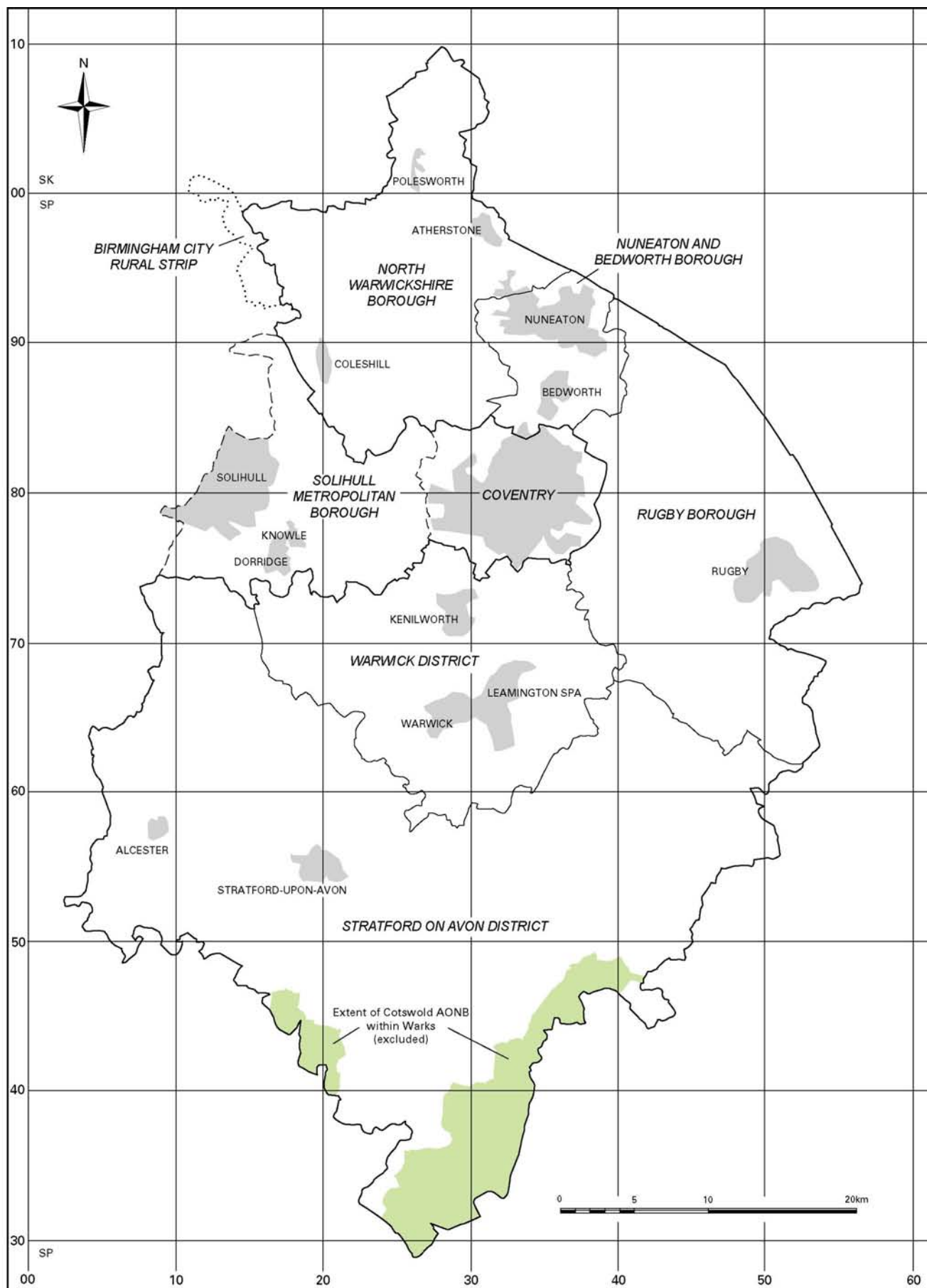
Following discussion with the Conservation and Archaeology Team at Coventry City Council it was agreed that the northwestern, predominantly rural, part of Coventry should be included in the Warwickshire HLC project where it was felt that the overall character of the landscape was similar to the rest of the Warwickshire HLC project area.

Part of the administrative area of Birmingham City Council

The rural strip within Birmingham to the east of Sutton Coldfield, roughly between Curdworth and Watford Gap was included as part of the Warwickshire HLC project; this too was part of Warwickshire until 1974.

Summary Table of Project Area:

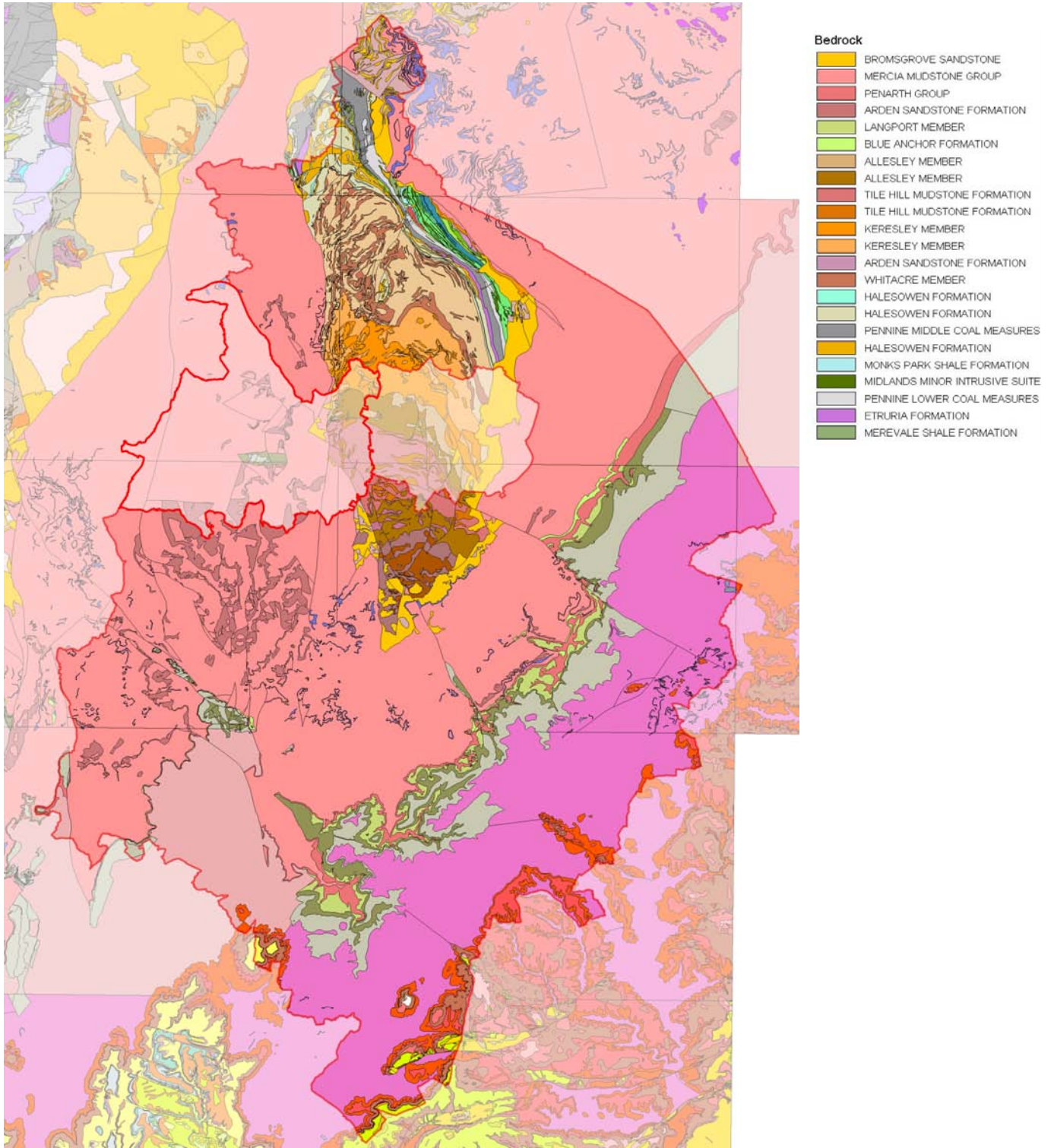
Area	Size (ha)
North Warwickshire	28,340
Nuneaton	7,872
Rugby	35,250
Warwick	28,200
Stratford	97,500
Solihull	17,780
Coventry (rural fringe)	9,834
Birmingham (rural fringe)	1,545
Total	226,321
(minus Cotswold AONB)	-10,282
Total study area	216,039



Map showing project area

Geology

The geology of Warwickshire is one of the most varied of any English County, spanning 600 million years. The rock units range through many geological periods including the Precambrian, Cambrian, Devonian, Carboniferous, Permian, Triassic, and the younger Jurassic. Unconsolidated Quaternary 'drift' deposits are widespread.



Bedrock Geology in Warwickshire (© BGS, NERC. All rights reserved.)

Solid (Bedrock) Geology

In the broadest sense, the ‘solid’ bedrock geology of the county can be divided into three terrains.

The Warwickshire Coalfield

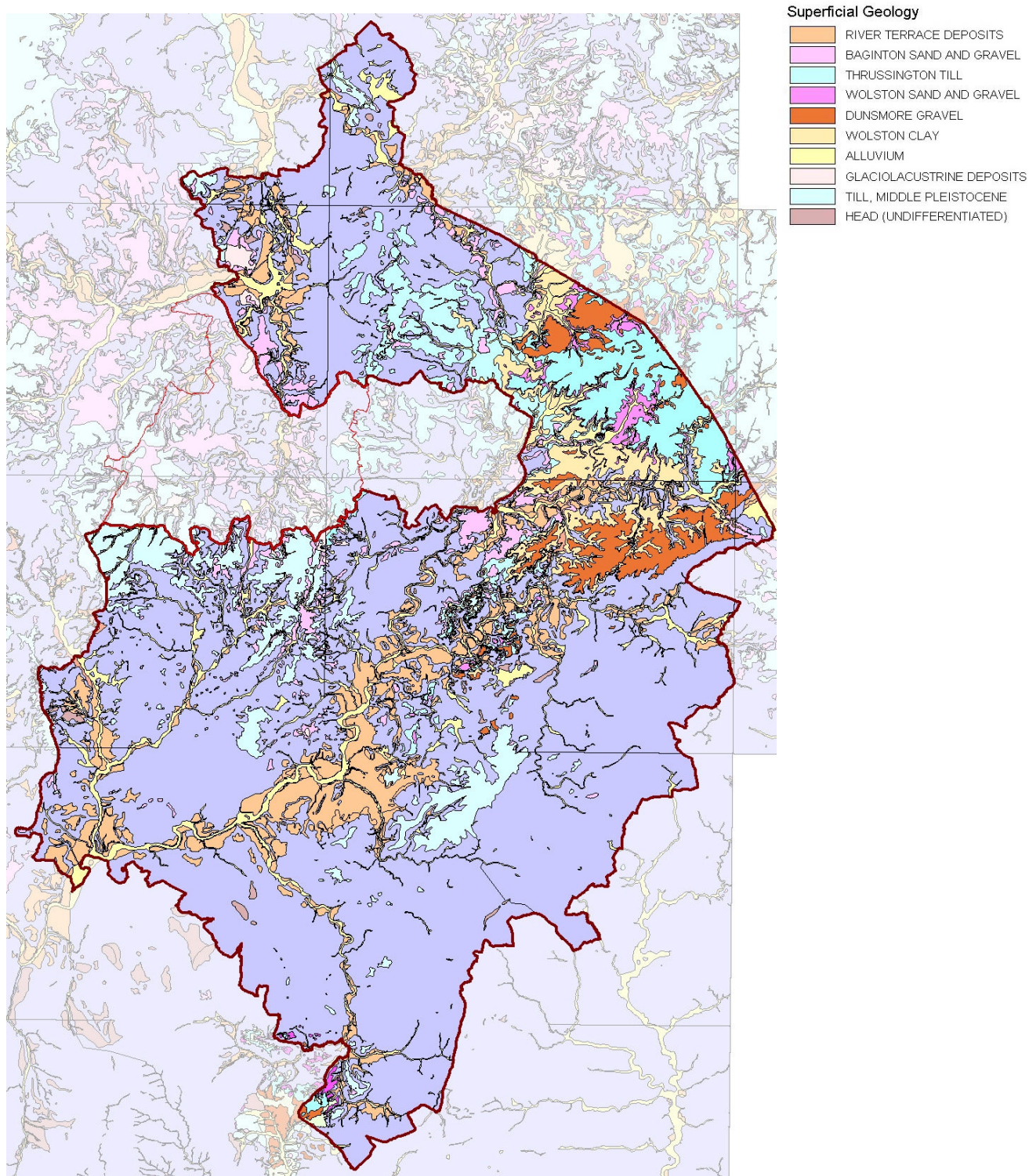
The Warwickshire Coalfield, partly equating to the Warwickshire plateau, comprises a broadly spindle-shaped outcrop of relatively old rocks, running from Warwick in the south to the Staffordshire border near Tamworth in the north. The surface geology is dominated by Upper Carboniferous mudstones and sandstones, roughly 300 million years old, overlain by similar rock-types of slightly younger Permian age in the Warwick-Kenilworth area. A narrow strip of older rocks up to 600 million years old, running up the eastern side of the coalfield from Bedworth to near Mancetter, is known as the Nuneaton Inlier. There, the surface geology includes narrowly outcropping, steeply dipping Precambrian volcanic rocks, Cambrian sandstones and shales, Ordovician intrusive igneous rocks and a small patch of Devonian sandstones near Mancetter. Carboniferous Coal Measures also occur at the surface in this area.

Triassic Lowlands

Surrounding the coalfield, a broadly u-shaped lowland terrain, running roughly from Polesworth, down through Brinklow, Cubbington, Leamington Spa, through the Avon Valley and northwards through Henley-in-Arden, Solihull and Coleshill. The surface geology of this area is dominated by sedimentary rocks of Triassic age – sandstones overlain by considerable thicknesses of red mudstone. Triassic sandstones also occur patchily on the margins of the coalfield. These are roughly 200 to 250 million years old.

Jurassic Fringe

The remainder of the county, running broadly from Rugby, down to Shipston-on-Stour, and then up into the Avon Valley near Stratford, is dominated by sedimentary rocks of Jurassic age, roughly 170 to 200 million years old. This area is dominated by the Feldon clay lowlands, underlain by Lower Jurassic mudstone and limestone beds. Along the eastern and southern fringes of the county, outlying hills and ridges of younger Jurassic rocks occur. Napton Hill, parts of the Burton Dassett Hills and Edge Hill for example, are capped by the Marlstone – a thin, resistant ironstone. Further south and west, as at Brailes, Tysoe and Ilmington, the hills are capped by sandstones and limestones of Middle Jurassic age.



Superficial Geology in Warwickshire (© BGS, NERC. All rights reserved.)

Drift (Superficial) Geology

Drift deposits comprise unconsolidated sediments dating back several hundred thousand years to the middle part of the Pleistocene period. These deposits are widely distributed throughout the county. Older drift deposits are partly glacial in origin and include river gravels, finely bedded clays and tills – pebbly clay deposits deposited by ice sheets. The younger drift deposits include deposits of sand and gravel – river terrace deposits, along the modern valley sides.

Landscape Context

Traditionally, the county has often been divided into three parts: the Arden, Feldon and the Avon valley. The Arden or 'high land' of the north-west comprises two plateau regions that reach a height of over 150 metres separated by a valley drained by the rivers Tame and Blythe. The soils are predominantly heavy and rather acidic, developed upon Mercia Mudstone, but with a surface layer of lighter glacial drift in places. To the east is the raised plateau of the East Warwickshire coalfield with coal-bearing rocks outcropping along its north-eastern margin. This region was more heavily wooded than areas to the south - the site of the supposed 'Forest of Arden'. Historically, this was the least populated part of the county, a slowly evolving landscape of scattered farms and fields with many patches of woodland and common waste; there is evidence that it was used seasonally (through transhumance) by occupants of the Feldon in the medieval period (Hooke, 1993).

Quite different is the flat plain of the Feldon or 'open land' in the south and east of the county. A platform generally between 100 and 175 metres above OD, with heavy clay soils developed mainly on the Lower Lias, this was already an area of intensive crop cultivation in prehistoric and Roman times. It was later to be characterised by nucleated villages set amidst open field systems, some of the latter surviving until parliamentary enclosure in the 18th and 19th centuries. The higher margins, including the Edgehill Fringe along the south-eastern boundary of the county, were areas of rather later development in which stock pasture played a more important role in early medieval and post-medieval times.

Between Arden and Feldon, the valley of the River Avon runs south-westwards across the middle of the county forming a transitional zone, with lighter gravel soils either side of the river. To the east, on the Dunsmore plateau, gravel deposits overlie the clays. The Avon valley was also an area of relatively early development and by medieval times market centres had developed for the exchange of goods from north and south.

Warwickshire's Landscape History

Dr Della Hooke has already written a summary of the "Changing Landscapes" of Warwickshire for the WCC Local Studies Toolkit. Rather than reproducing this work here this has been included as Appendix 1. Alternatively, the following link leads to the text online:

<http://timetrail.warwickshire.gov.uk/toolkitview.aspx?tid=2&page=30>

Warwickshire HLC Project Details

Project Duration

The Warwickshire HLC Project was started in May 2006 and finished in March 2010. The initial phases of the project and the digitising phase took around two and half years to complete with the analysis phase taking around 6 months and the report writing taking a further 6-8 months (although this final phase was achieved part time).

Project Team

HLC Project Manager: Jonathan Parkhouse (County Archaeologist)

HLC Project Officer: Ben Wallace

HER Manager: Emma Jones

English Heritage's Characterisation Inspector:

Dave Went (2006-2008) and

Peter Herring (2008-2010)

Limitations of the project and data

Historical Period Limitations

The HLC data relates to the current historic landscape and although previous historic landscapes are also recorded these have really only been attempted where data was readily available as far back as the medieval period.

Data limitations

The HLC consists of two parts; GIS polygons and linked detailed records.

The GIS data has been produced by digitising, predominantly freehand, using OS LandLine as a base-map, although some snapping was carried out in places. Each polygon should also fit to the surrounding polygons creating a seamless layer; however, there will be inconsistencies and places where the data has left small holes and intersections. The polygons also reflect the fact that in general they were digitised at 1:2500 scale and may not always precisely match to OS boundaries. This has been outweighed by the fact that due to upgrading the base-map to OS MasterMap, which has Positional Accuracy Improvement, the HLC dataset does not exactly match the MasterMap dataset. At the scale of digitising, use and average polygon size this is not expected to be a problem but should always be considered.

How to use this report

Because of the size and complexity of this report some explanation of its layout is given here to help guide people to the right section and make it easier to use. It is not intended that this report should be read cover to cover by all users, rather that readers can dip into the different sections and find the information relevant to them.

Introduction

This introduction forms the first part of the report and serves to introduce both HLC and the Warwickshire HLC project. For further details on the national HLC programme refer to the bibliography towards the end of the report or visit English Heritage's website: <http://www.english-heritage.org.uk/server/show/nav.1293>

Methodology

Following this introduction a brief summary of the methodology used for this project is given. Further details of the methodology can be found in Appendix 3.

Analysis: HLC Broad Types

The next section of the report presents the analysis carried out using the HLC data. The first chapter in this section looks at each of the twelve HLC Broad Types. For each HLC Broad Type there is a summary box showing a project wide distribution map, some key statistics and a representative photograph of the type in the landscape. Description and interpretation then follow and include aspects such as change over time, biodiversity potential, archaeological potential, and research and management issues. Finally an example of the HLC Broad Type as mapped is shown.

Analysis: HLC Types

This chapter uses the same style and layout as the previous one but in this instance it is concerned with the 55 HLC Types identified.

It is hoped that these two chapters will be used by people looking at the HLC data in their area who want to understand more about a particular HLC Broad Type or HLC Type.

Analysis: County-wide

This chapter shows how landscape characterisation has developed historically in Warwickshire and how HLC can be used at a broad countywide level to analyse particular aspects and themes of the historic landscape including comparison with other datasets.

Analysis: District-wide

This chapter describes the results of more detailed analysis on the HLC material at a Local Planning Authority (LPA) level. For each LPA an introduction is given summarising key facts about the area, a summary of historic landscape character follows with statistics about the Broad HLC Types and then more detailed analysis is arranged by HLC Broad Type with detail added about the HLC Types, their distribution across the area and their impact on the development of historic landscape character over time. It is anticipated that analyses at Local Planning

Authority level would be useful as source material for Local Development Frameworks.

Applications of HLC

Following the analysis section there is a chapter on the applications of HLC; both those that have already taken place using the Warwickshire HLC, and potential applications that could take place in the future.

Dissemination

This chapter highlights the different methods of dissemination that have been and could be used for HLC information.

Recommendations

This chapter looks at possible enhancement projects for the Warwickshire HLC and how it can best be updated and used on a day to day basis. It also looks at where other projects or datasets could benefit from using HLC, with some recommendations made for further work and studies.

Further Information and Contact Details

Here details are given on how and where to access information and material from the HLC.

Bibliography and Appendices

Finally, at the end of the report a bibliography and appendices are included for reference.

Chapter 2 - Methodology

Below is a very brief summary of the methodology used for the Warwickshire HLC project. Fuller details can be found in The Warwickshire HLC Desk Manual (Appendix 3).

Background

The Warwickshire HLC project, like most others, is based on previous HLC projects with adaptations and innovations of method and process reflecting local distinctiveness and local issues. Warwickshire owes much to the Staffordshire and Shropshire HLC projects and is loosely based on these. Other ideas and techniques have been adopted from the Black Country and Leicestershire HLC projects although to some extent all previous HLC projects have contributed in some way to define all current HLC projects.

The development of the HLC methodology has both reflected and informed changes in the way archaeologists and others describe and manage the historic environment. These changes include:

- A concern with the whole of the humanly modified landscape rather than solely the demonstrably archaeological 'sites' within it.
- A change in analytical scale from the small-scale site/monument to the wider landscape.
- An increased concern with integrated and sustainable policy development and decision-making.
- A developing political context for understanding landscape, as shown, for example, by the European Landscape Convention.
- A move from concern with 'relict' landscapes to concern with the present-day landscape which has been shaped by change and modification over centuries and millennia and by a variety of processes.
- A realisation that the concept of 'landscape' is based on subjective considerations as well as objective criteria. Landscape is something which we perceive, even more than it is something we create.
- A more detailed articulation of the realisation that understanding landscape depends on understanding the dynamics of its creation and the underlying cultural processes and political, social, economic and cultural influences.
- The realisation that the best means of protecting historic landscape is not designation but sound management underpinned by accessible material, including data which can be analysed and understood.
- The acceptance that HLC is a relatively generalised characterisation of the landscape's historic attributes which is intended to serve as a means of resource management, and which provides an approach which is consistent, transparent, repeatable and comprehensive. This approach leaves open the possibility of more detailed assessment being undertaken later as necessary. It can thus be used for spatial planning, development control, landscape strategies and resource management (Clarke et al, 2004).

Stages

The Warwickshire HLC project was split into four stages:

Stage 1: Familiarisation, refinement of methodology, sample work (pilot project)

Essentially this consisted of a review of methods and sources that it was expected would be used in the project. The method was consequently refined and the HLC Types to be used in the project were defined.

Following this, two pilot areas were selected to test the methodology and see if further refinements were needed. These pilot areas each formed a 10km block, one between Rugby and Bedworth and the other between Leamington and Stratford. They were in distinct parts of the county on the borders of different landscape character areas. Although this did test differences in landscape character it did not test all landscape types and in hindsight it might have been better to have chosen a number of smaller areas with distinct historic landscape character such as a rural area, an industrial area and an urban area. Urban landscape in particular was a type that was characterised in some detail and took much longer than expected to complete in the project.

At this point the HLC Desk Manual was produced and a project forum meeting was held to inform people of the HLC project, the results of the first stage and what the next stages were to involve.

Stage 2: Data collection and assignment of character types

Digitising, mapping and record creation for the whole of the remainder of the study area.

Stage 3: Review, analysis and interpretation

Analysis of the finished HLC including comparison with other mapped and described datasets, assessments and studies. The results of this work forms the majority of this report.

Stage 4: Preparation of a report, archive and dissemination of results

Production and dissemination of this final report and production of an archive containing all the material generated by the project.

Database

The exeGesis HBSMR HLC module has been used to record the HLC data. This is essentially an Access database with linked GIS capability. Currently the HBSMR version used is 3.61 and the GIS is MapInfo 9.5.

Using this software makes it available for consultation by archaeologists, planners, researchers and the general public.

Sources

A variety of sources have been used in the HLC process from historic maps and aerial photographs to modern digital mapping. The sources used in the project are listed in Appendix 3.

Defining Polygons

The Warwickshire HLC has been a predominantly desk-based exercise that draws together information from a variety of sources.

Polygons have been defined by grouping together individual units from OS digital mapping on the basis of a common current land use, previous land use and morphology. Each polygon contains a particular combination of attributes which have been assigned to a single HLC Sub-Type. Generally HLC polygons have been digitised in MapInfo direct to screen at 1:2,500 scale.

In rural areas the usual minimum size for HLC polygons is 1 ha since it is assumed that landscape character cannot be reasonably determined for areas smaller than this. For urban areas though there are cases where HLC polygons can be defined less than 1 ha in size. In general in HLC the approach has been to avoid small polygon sizes.

Data structure

Each polygon created through the mapping process has data attached to it as a linked record held in the HLC module of the HBSMR software. The structure of the data is largely determined by the HLC module itself; however, HLC Broad Types, HLC Sub-Types and associated attributes have been customised to meet the requirements of the study area.

The nature of the HLC module is that it is dynamic so that new HLC Sub-Types can be added and previously defined ones can be updated or changed. It is very unlikely that the HLC Broad Types will change and also unlikely that HLC Sub-Types will change now that the project has finished, but the flexibility to do so exists. New HLC Sub-Types were easily added to the database in the pilot phase (e.g. Common Grazed Woodland as a previous HLC Type).

Each of the HLC records in the database has been assigned a basic classification category, known as an HLC Broad Type. There are twelve HLC Broad Types for Warwickshire (see Chapter 3 below). These are further broken down into HLC Sub-Types of which there are 124 recorded in the database. These have been joined to form the 55 HLC Types used for detailed analysis in Chapter 4. Definitions of both the HLC Broad Types and HLC Sub-Types can be found in Appendix 3.

Historic Landscape Character Attributes

Each of the HLC Broad Types has a series of attributes assigned to it. When an HLC record is created and polygon defined, key characteristics of that area can then be displayed for that record. Details of these attributes can be found in Appendix 3

Adding and editing records

Detailed information for record creation and editing can also be found in the Desk Manual (Appendix 3)

Chapter 3 - Historic Landscape Character Analysis: HLC Broad Types

Introduction

This chapter analyses the Warwickshire HLC material on a project wide level in terms of the 12 HLC Broad Types identified, namely:

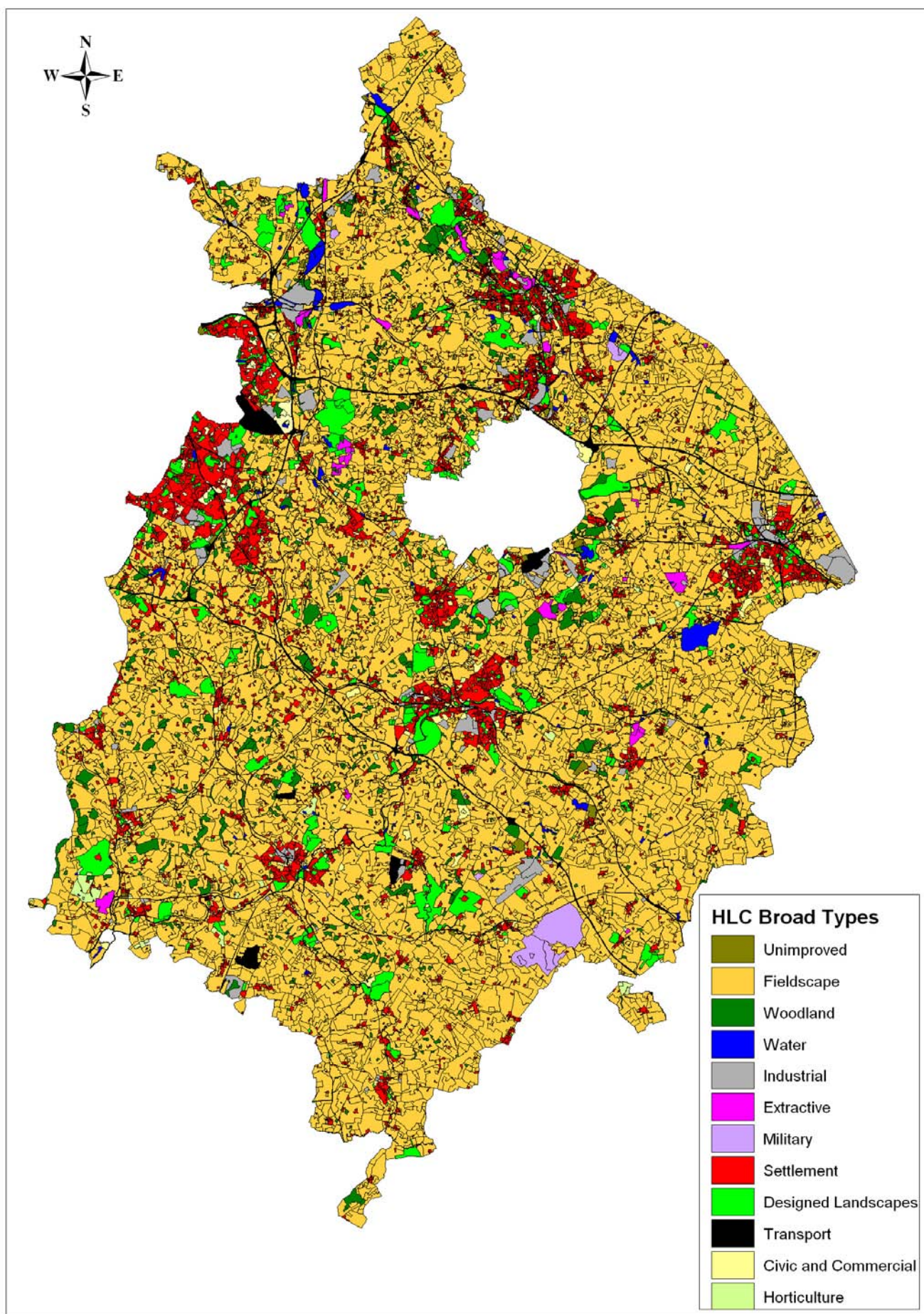
- Unimproved (UIM)
- Fieldsapes (FSC)
- Woodland (WDL)
- Water (WAT)
- Industrial (IND)
- Extractive (EXT)
- Military (MIL)
- Settlement (SET)
- Designed Landscapes (PAR)
- Transport (TRA)
- Civic and Commercial (CIV)
- Horticultural (ORC)

For reference a county wide map of these HLC Broad Types is shown below.

A definition example is given first detailing the meaning of each of the headings in the analysis and explaining how any statistics have been generated. For each HLC Broad Type there is a summary box showing a project wide distribution map, some key statistics and an example photograph of the type in the landscape. The descriptive headings then follow, including aspects such as change over time, biodiversity potential, archaeological potential, and research and management issues. Finally an example of the HLC Broad Type as mapped is shown.

The purpose of this analysis at the HLC Broad Type level is to give a very broad overview of the Historic Landscape Character of Warwickshire. The next chapter gives a similar analysis but at a much more in depth level, breaking down the 12 HLC Broad Types into their 55 individual HLC Types.

For detail at a district level please refer to the District-wide Analysis Chapter (Chapter 6).



Map of HLC Broad Types

Definition Example

Name of HLC Broad Type (HLC Broad Type Code)

<p><i>Distribution Map</i></p>	<p>Legend Colour: Colour used in mapping</p> <p>Total Area: The total area that this type forms in hectares with the percentage of the total project area it covers in parentheses.</p> <p>No of polygons: The number of polygons that make up this type with the percentage of all the polygons in the project area in parentheses.</p> <p>Average Polygon Size: Calculation based on the total area divided by the number of polygons with a comparative size description in parentheses (<7 ha = small, 7-20 ha = medium, 20-40 ha = large, >40 ha = very large)</p> <p>Occurrence: Occurrence is assessed relative to other HLC types using the higher of the total area covered or the number of polygons. It is intended to show whether this is a commonplace or unusual element of historic landscape: <0.5% = Very rare, 0.5 - 2% = Rare, 2-5% = Occasional; 5-20% = Common, 20-50% = Abundant, >50% = Dominant</p> <p><i>Photo of Landscape Type</i></p>
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Definition:

Definition of HLC Type for the purposes of the project

Description:

Brief description of HLC Type including key characteristics and patterns found in the county.

Historic Processes:

The wider understanding of this HLC Type including historic processes and specific development in Warwickshire. HLC Broad Types only.

HLC Types:

Here the HLC Types that make up the HLC Broad Type and the HLC Sub-Types that make up the HLC Type are given. A full list of HLC Sub-Types used in the database can be found in the Desk Manual (Appendix 3)

Period:

The broad landscape period or periods that this type originates from:

- Pre Medieval (pre 1066)
- Medieval (1066-1540)

- Post Medieval (1540–1750)
- 18th-19th Century
- Early 20th Century
- Late 20th Century)

Trajectory of Change (1880s – 1955):

A very general comparison of the change in the area of the county covered by the HLC Type between 1880s and 1955. The trajectory and rate of change is indicated as Increasing Rapidly (>50%); Increasing Moderately (20-50%); Increasing Slowly (5-20%); Stable (<5% change); Declining slowly (-5 - -20%); Declining rapidly (-20 - -50%); Declining critically > (-50%)

Trajectory of Change (1955 – 2001):

A very general comparison of the change in the area of the county covered by the HLC Type between 1955 and 2001.

The trajectory and rate of change is indicated as Increasing Rapidly (>50%); Increasing Moderately (20-50%); Increasing Slowly (5-20%); Stable (<5% change); Declining slowly (-5 - -20%); Declining rapidly (-20 - -50%); Declining critically > (-50%)

Reason for change (1880-2001):

Why this HLC Type has changed the way it has during the 20th century.

Factors influencing further change:

The main predicted factors that could lead to the creation or loss of this HLC Type.

Biodiversity Potential:

A simple indicator of the general biodiversity interest or potential of this HLC Type. Individual sites will vary and require specific assessment. (High = typically species rich and varied; Medium = Moderate amount of species; Low = species poor.)

Archaeological Potential:

A simple indicator of the general correlation of archaeological sites and historic buildings with this HLC Type. This indicator is more relevant for historic periods where buildings and monuments may be contemporary with the HLC Type; for earlier periods less correlation can be expected. Individual sites will vary and require specific assessment (High = typically associated with a wide range/well preserved monuments; Medium = Moderate range of associations/preservation; Low = few/rare associations/poor preservation).

Management:

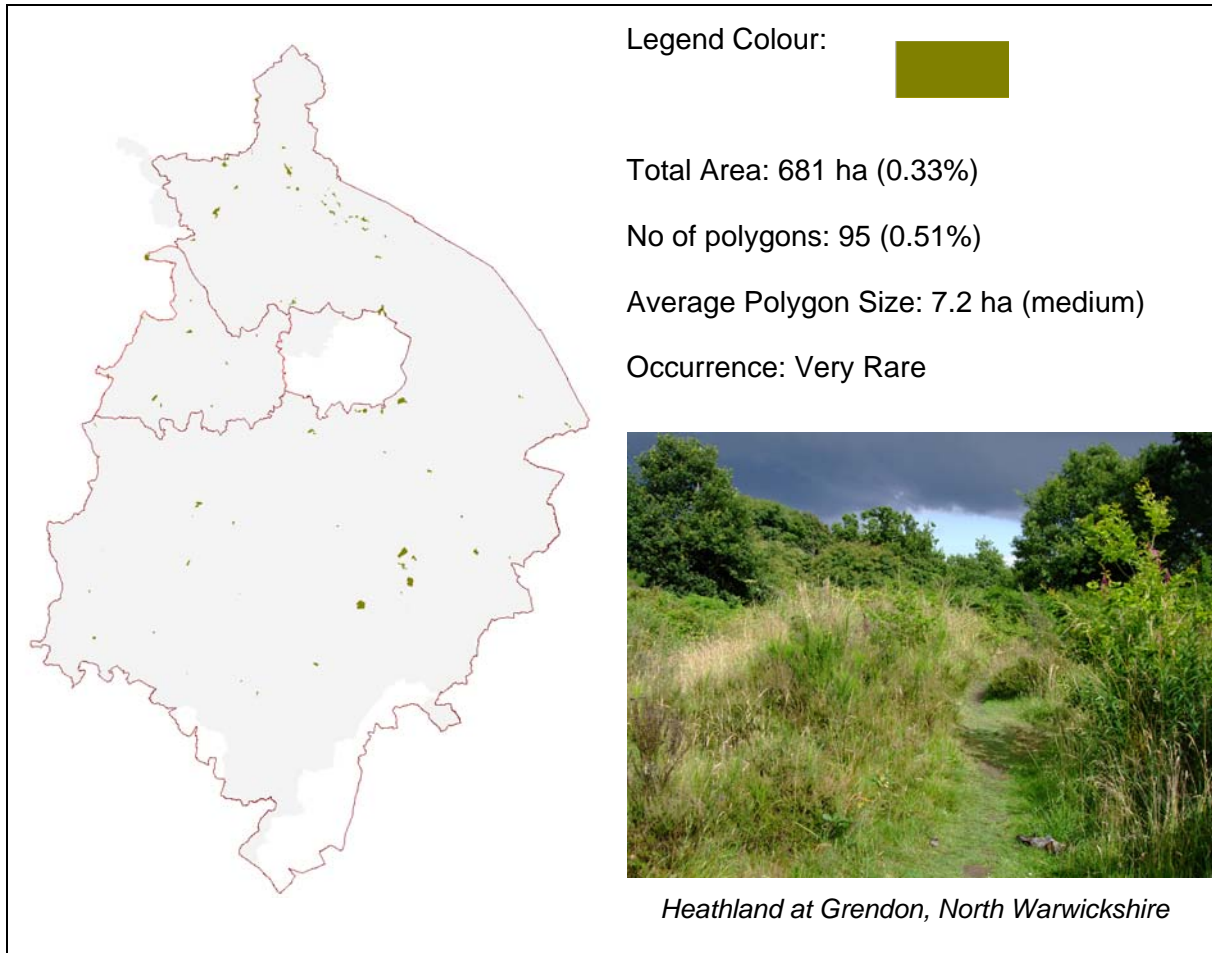
Main management issues and objectives for this HLC Type.

Research:

Potential for further research for this HLC Type

Example Map showing HLC Broad Type/ HLC Type

Unimproved Land (UIM)



Definition:

Areas of land that have remained largely unimproved over a period of time including Heathland, Commons and Scrubland.

HLC Types:

Heathland, Commons, Scrubland

Description:

Mainly found as a previous HLC type, especially in areas that were once common or heathland, recognised from map evidence and place-name evidence. Present unimproved land is found sparsely scattered throughout Warwickshire with most of it being the more modern remains of in-filled quarries from mineral extraction. A very few areas are patches of common and heathland remaining from once larger areas. As a previous HLC type this can be found fairly extensively throughout Warwickshire with concentrations at Dunsmore and in the Solihull/North Stratford/North West Warwick area.

Historic Processes:

Heathland is a landscape type that has developed primarily from human interaction with the landscape from the clearance of trees in the prehistoric period followed by intensification of land use with the introduction of agriculture and the grazing of livestock (Hawley et al, 2008.). In Warwickshire there were probably areas of heathland in the west around Solihull and in the east at Dunsmore. The exact extent is not known and can only be deduced from place-name evidence, the few pockets of surviving heathland and the later commons that developed.

Commons are land owned collectively or by one person, but over which other people have certain traditional rights, such as to allow their livestock to graze upon it, to collect firewood, or to cut turf for fuel. Recently the term has often come to apply to areas of land which a community has rights or access to. In Warwickshire there were historically large areas of common in the west, although other areas had

commons too. They were usually associated with heathland and other areas of poor soil where agricultural exploitation was difficult. Settlement often grew up close to the common and in the medieval and later periods encroachment onto the common from housing and enclosure and intensified use, such as mining, took place.

Scrub in this definition mainly relates to human processes that have left an area of land unused where natural environmental factors take over, producing a scrub habitat. This can happen over any period of time but in the last few hundred years and in Warwickshire, scrub usually develops as a result of minerals extraction.

Period:

As far as can be determined mostly Medieval or earlier; however the scrubland type mostly appears post 1955

Trajectory of Change (1880s – 1955):

Declining critically (-98%)

Trajectory of Change (1955 – 2001):

Increasing slowly (+12%)

Reason for change (1880-2001):

The biggest historic factor was the enclosure of fields from the medieval period onwards, predominantly through the parliamentary and later enclosure of fields (17th century onwards).

More recently settlement expansion and encroachment onto unimproved land has also had an effect including the development of facilities associated with settlement.

The increase of extractive industries in the later 20th century often leaves the land, post extraction, to form unimproved scrub.

Factors influencing further change:

Continued settlement and enclosure encroachment onto the remaining areas of heath and common could lead to further loss. Some areas of common may develop into woodland if left un-managed. Areas of scrub could increase due to increased minerals extraction activity, however present areas of scrub may also be

developed for other purposes such as housing, recreation, woodland or farming.

Biodiversity Potential:

High - The nature of this type is that they are frequently the least intensively managed areas of land, often resulting in a more natural state than other HLC types and with a high potential for biodiversity.

Archaeological Potential:

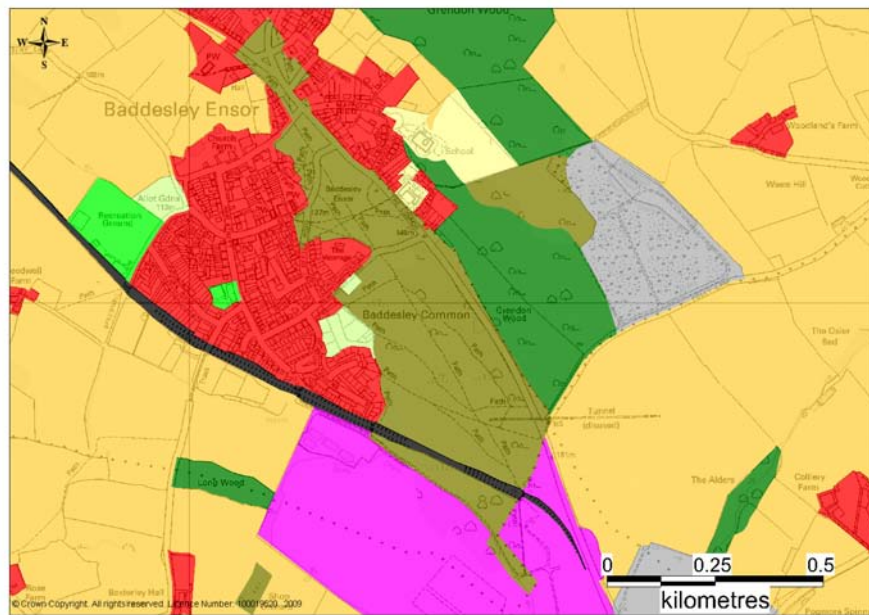
Medium - There are few archaeological sites associated with this type; in fact these areas show a distinct lack of archaeological sites, the only exception being the Dunsmore area (as an area of previous unimproved land) which has a high concentration of prehistoric sites. This lack of archaeology may be due to a lack of archaeological investigations in these areas. It may be that these areas have a low potential for historic sites due to them being relatively unused during most historic periods. However this may not have been the case for the prehistoric period. Lack of agricultural activity and absence of Ridge and Furrow will result in low disturbance to buried deposits as at Ling Hall Quarry, Church Lawford (Dunsmore Heath).

Management:

As an HLC type this type is very rare and declining critically and soon there may be no examples of these types left. Those that remain may be unimproved scrubland, a more modern creation from lack of use of land rather than a continuity of unimproved land such as common or heathland. These types should be retained where possible, with consideration given to encourage reversal to these types in areas where suitable.

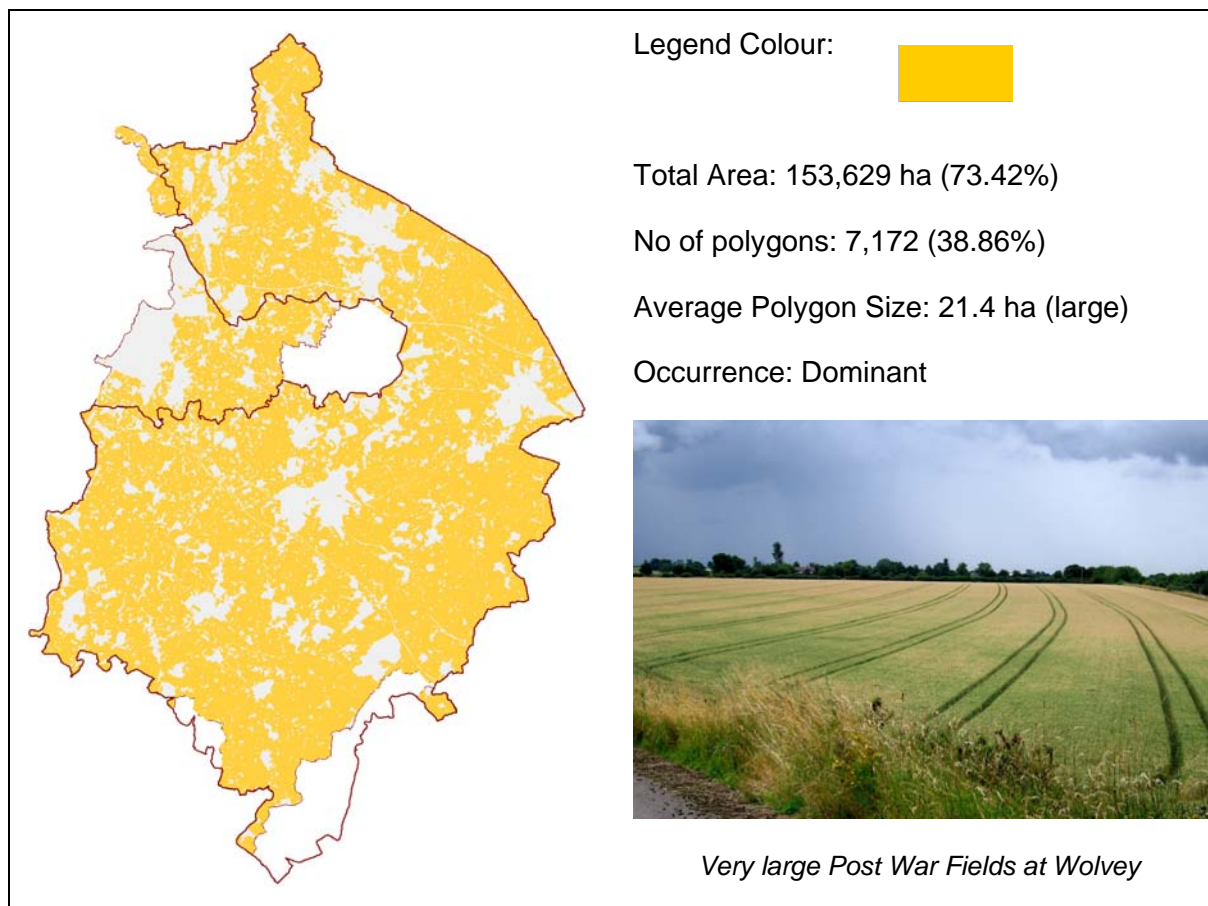
Research:

The former extent of unimproved land in Warwickshire is still not greatly understood. The location and role of commons and heathland and the interaction of people on these areas needs to be better understood. The potential for prehistoric sites on this type needs to be explored.



Unimproved Land at Baddersley Ensor/Grendon, North Warwickshire

Fieldscapes (FSC)



Definition:

Areas of land that are identified as being used for some form of agriculture. These will be predominantly enclosed land but include medieval open fields as a previous type.

HLC Types:

Squatter/Encroachment Enclosure, Floodplain and Meadow, Irregular (piecemeal) Enclosure, Planned Enclosure, Very Large Post War Fields, Paddocks and Closes, Woodland Clearance.

Description:

The pre-dominant type in Warwickshire covering around 73% of the total area. Further details are best found in the texts for individual fieldscape types in Chapter 4.

Historic processes

Enclosure took place in Warwickshire from the medieval period onwards, first as informal piecemeal enclosure that often

followed patterns of agriculture and surrounding landscape features. The result was irregular shaped fields, often with curvilinear reverse 'S' shaped boundaries, and edges of fields leading up to natural landscape boundaries such as woodlands and brooks. This early enclosure took place on land used as open fields as well as enclosing heath, common and woodland. Later in the 17th, 18th and 19th centuries a more formal process of enclosure took place including parliamentary enclosure. This formed more rectilinear fields with straight boundaries that often followed straight planned roads and other features. The next major development took place in the latter part of the 20th century, post World War II, when more mechanised forms of intensive agriculture demanded larger more open fields. The result was the removal of hedges and boundaries and the creation of large open prairie fields.

Period:

Medieval - Late 20th century

Trajectory of Change (1880s – 1955):

Declining slowly (-18%)

Trajectory of Change (1955 – 2001):

Stable (+1%)

Reason for change (1880-2001):

Change due to loss of fields to increasing settlement and industry in the early 20th century. This appears to have largely stabilised in the later 20th century.

Factors influencing further change:

Enclosure is most likely to change from one type to another but there can be increases of fields from removal of woodland and use of unimproved land. Loss of enclosure is most likely from settlement expanding into the countryside especially around core urban areas. Industrial development can also have an effect with extractive industries having the biggest impact but often the land is landscaped on abandonment and converted back to fields. Agri-environment and woodland grant schemes can add or lose fields to the landscape.

Biodiversity Potential:

Medium - High - The nature of this type is that they can contain high potential for biodiversity due to hedgerows, in-field trees and the variety of habitat often found associated with fields. However, intensive forms of farming and removal of hedgerows, trees, ponds etc often lead to less biodiversity. The potential is high

because the opportunity is there to adjust management to enhance many of these types and so benefit the natural environment

Archaeological Potential:

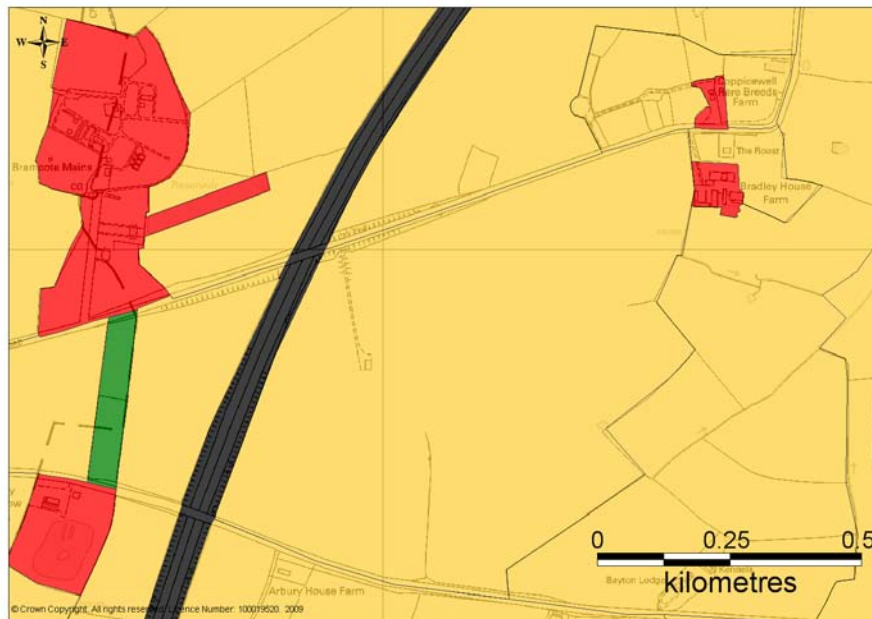
Medium - High. Many archaeological sites are found within fields; however, the potential really depends on the type of fieldscape and the use of the land. For further information refer to individual fieldscape types in Chapter 4.

Management:

Complex management issues, which will be discussed in greater detail under individual fieldscape types. Ideally most fieldscapes should be under Environmental Stewardship with appropriate management of the character of the fields identified when drawing up agreements. In general boundaries should not be removed but appropriately managed where possible. Re-instating boundaries should also be considered carefully in the light of an area's overall historic landscape character in order to avoid pastiche.

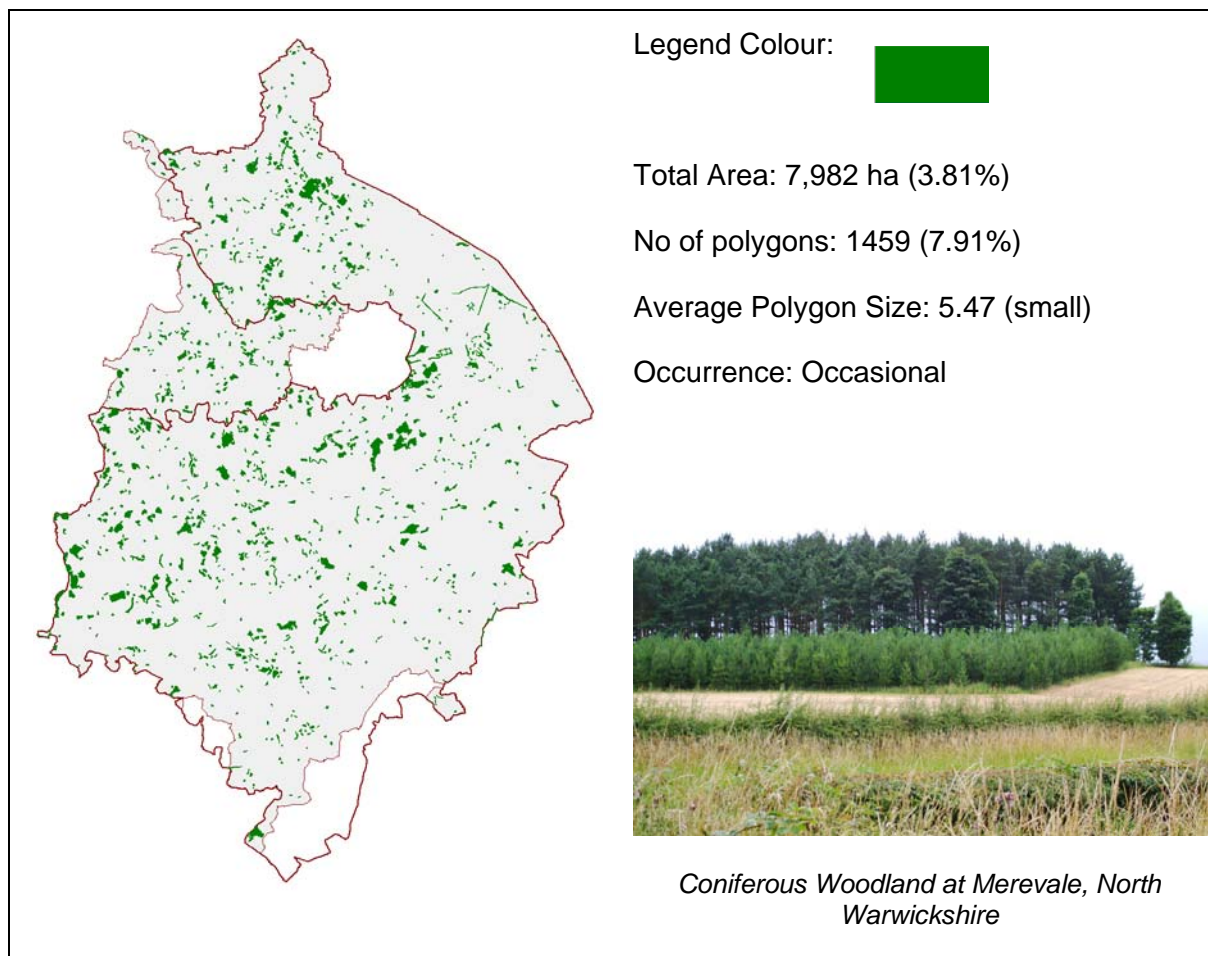
Research:

Further research needs to be applied to understand enclosure in Warwickshire better. The development of later field types is better understood but the provenance, origins and development of piecemeal enclosure, assarting and other field types less so.



Very Large Post War Fields at Wolvey, Rugby

Woodland (WDL)



Definition:

Areas of land that are predominantly covered with trees.

HLC Types:

Ancient Woodland, Woods with Sinuous Boundaries, Broad-leaved Plantation, Mixed Plantation, Coniferous Plantation

Description:

Woodland is scattered throughout Warwickshire with no one area that is particularly densely wooded. There is a definite concentration in the North and West of the county with a further concentration in the centre.

Historic processes:

After the last ice age and prior to human activity, most of England was wooded. From the Mesolithic period onwards areas of woodland were gradually cleared. Later in the Neolithic period, with the advent of agriculture, more intensive use of the land

led to more woodland clearance. This continued through to the medieval period where woodland clearance and woodland management developed at a faster pace. In Warwickshire the woodland that remained by the medieval period was generally found in large areas in the north and west, the Arden area. The south and east were used intensively for agriculture. Gradually the Arden woodland was opened up and assarted and small settlements developed. By the post medieval period and the industrial revolution, timber, charcoal and bark from woods were being used for a variety of industrial processes. By the 20th century discrete pockets of ancient woodland remained, with some plantations that had been created as part of designed landscapes and later as sources of timber; these were often of non-native or coniferous trees. Other small areas of woodland were created or managed for hunting and often have the names 'covert' or 'spinney'. Woodland continued to be cleared in Warwickshire for fields and

settlement expansion. However by the later part of the 20th century woodland replanting programmes and the gradual decline of woodland destruction has led to a stabilisation of woodland in Warwickshire.

Period:

Medieval - Late 20th century

Trajectory of Change (1880s – 1955):

Declining Critically (-55%)

Trajectory of Change (1955 – 2001):

Stable (+4%)

Reason for change (1880-2001):

Woodland was dramatically reduced by half in the early 20th century. Part of this was due to encroachment into woodland from farming as well as the increase of industrial sites. Settlement expansion and early post war population explosion often devoured woodland as well as the associated transportation and civic and commercial development. In the later 20th century woodland has stabilised and is making a small increase, presumably due to secondary woodland developing on abandoned sites and the effects of funded woodland planting schemes.

Factors influencing further change:

Woodland may decline due to settlement expansion or modern clearance of woods for agricultural purposes. Woodland may expand slightly thanks to modern woodland planting schemes and a change in national policy.

Biodiversity Potential:

High - The nature of this type is that it has a high potential for biodiversity although it varies according to the age and type of woodland.

Archaeological Potential:

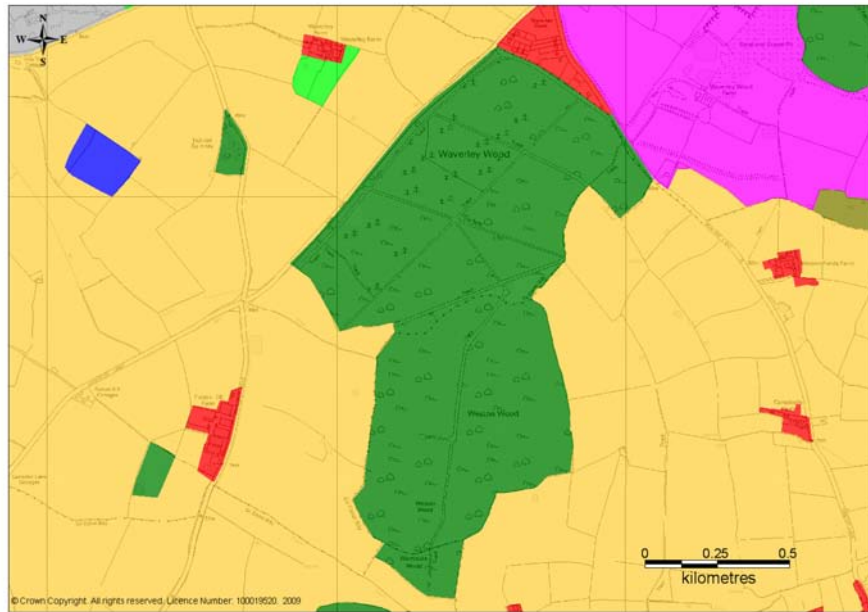
Medium - High. Archaeological features are often found within wooded areas and can be preserved surprisingly well. Examples include prehistoric features as well as medieval and later features associated with woodland management.

Management:

Woodland management plans should aim to conserve historic woodland features; however, management depends on the circumstances of each wood and type of wood. In the West Midlands the Forestry Commission uses a Woodlands Opportunity Map to help manage woodland planting; this uses HLC material where available to take account of the historic environment.

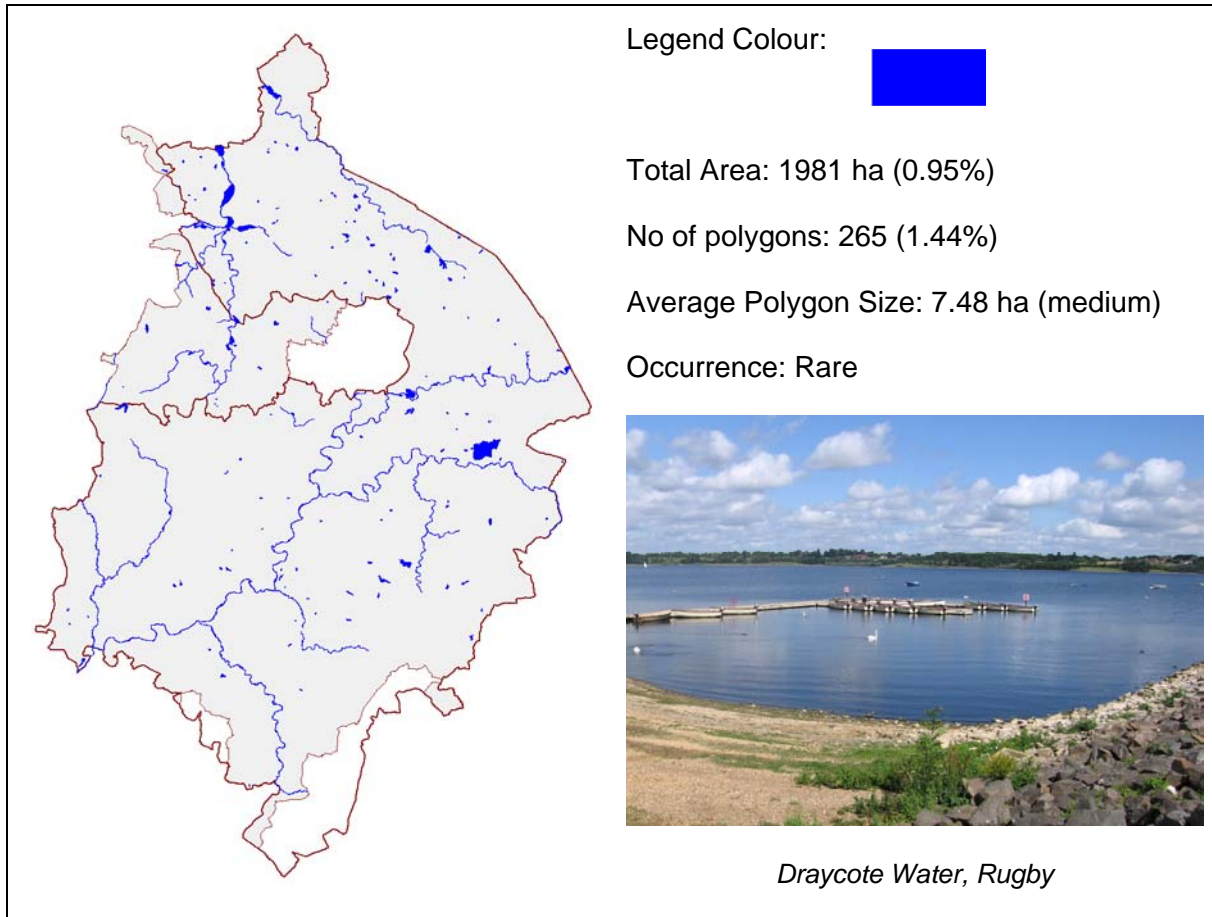
Research:

Some work has been carried out into the woodland in Warwickshire from the medieval period (Wager, 1998). However, more work needs to take place to understand the origins, change and historic use of woodlands in Warwickshire over time. Further research into archaeological features in woodland is necessary. Some woods in Warwickshire are known to contain important archaeological features but many other woods could possibly contain archaeological features yet to be discovered. New techniques such as LIDAR could help. Some of the woodland types could be used to map possible ancient woodland and indicate what a medieval wooded landscape would have looked like to help ecology colleagues and the Forestry Commission. Research could investigate woodland features identified from the HLC such as covert and spinney woodland names, along with peculiar long sinuous strips of woodland that exist in Warwickshire.



Waverley Wood, Warwick

Water Features (WAT)



Definition:

Areas of land that are dominated by water or water related features

HLC Types:

Artificial Body of Water, Natural Open Water, Marsh

Description:

The river system in Warwickshire is determined by its geography with two main watersheds dividing the county. The Avon and its tributaries run from the north east border of Warwickshire south and west while the Tame, Blythe and Cole start in the Solihull/Birmingham area and meet with the Anker and run north. This also forms one of the main watersheds for the midlands.

In terms of other water features there are two large reservoirs (Earlwood and Draycote Water), while smaller lakes and ponds are often found associated with old aggregates extraction sites. There are

smaller ponds and water features scattered throughout the county.

Historic processes:

The river system in Warwickshire has influenced the county for a long time. Determined by the topography and geology of the county it has had a considerable impact on human interaction with the landscape. There are few other natural water features in the county. The earliest recognisable artificial features are medieval fishponds and subsequently mill ponds, leats and races. Later water management is found in the development of water meadows and then the advent of the canal network with canal feeders and reservoirs, and finally later 20th century reservoirs for the supply of water to an increasing population.

Period:

Pre medieval - late 20th century

Trajectory of Change (1880s – 1955):

Increasing rapidly (+25%)

Trajectory of Change (1955 – 2001):

Increasing rapidly (+44%)

Reason for change (1880-2001):

The increase in the 20th century is due to the development of large reservoirs to supply water for the increasing settlement and population as well as the increase of leisure water features such as fishing lakes.

Factors influencing further change:

Further fresh water may be necessary to supply an increasing population which may also demand more artificial water features for leisure purposes. Increased mineral extraction activity may also produce further water features.

Biodiversity Potential:

High - Water features by their nature are suitable for a variety of wildlife.

Archaeological Potential:

Medium - Although by its nature water features do not have many archaeological

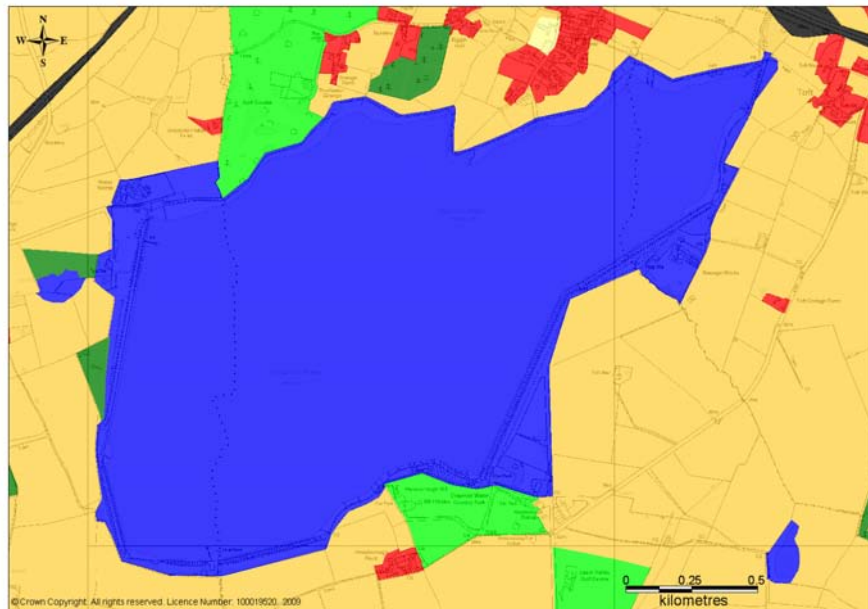
potential per se there is potential in the form of water-logged deposits, whilst river systems are often associated with historic water management features. Some reservoirs, lakes and ponds now have an historic interest.

Management:

Management should be related to keeping water logged areas stable so as to continue to preserve any remains. Water management features should be managed to respect their historic and archaeological features.

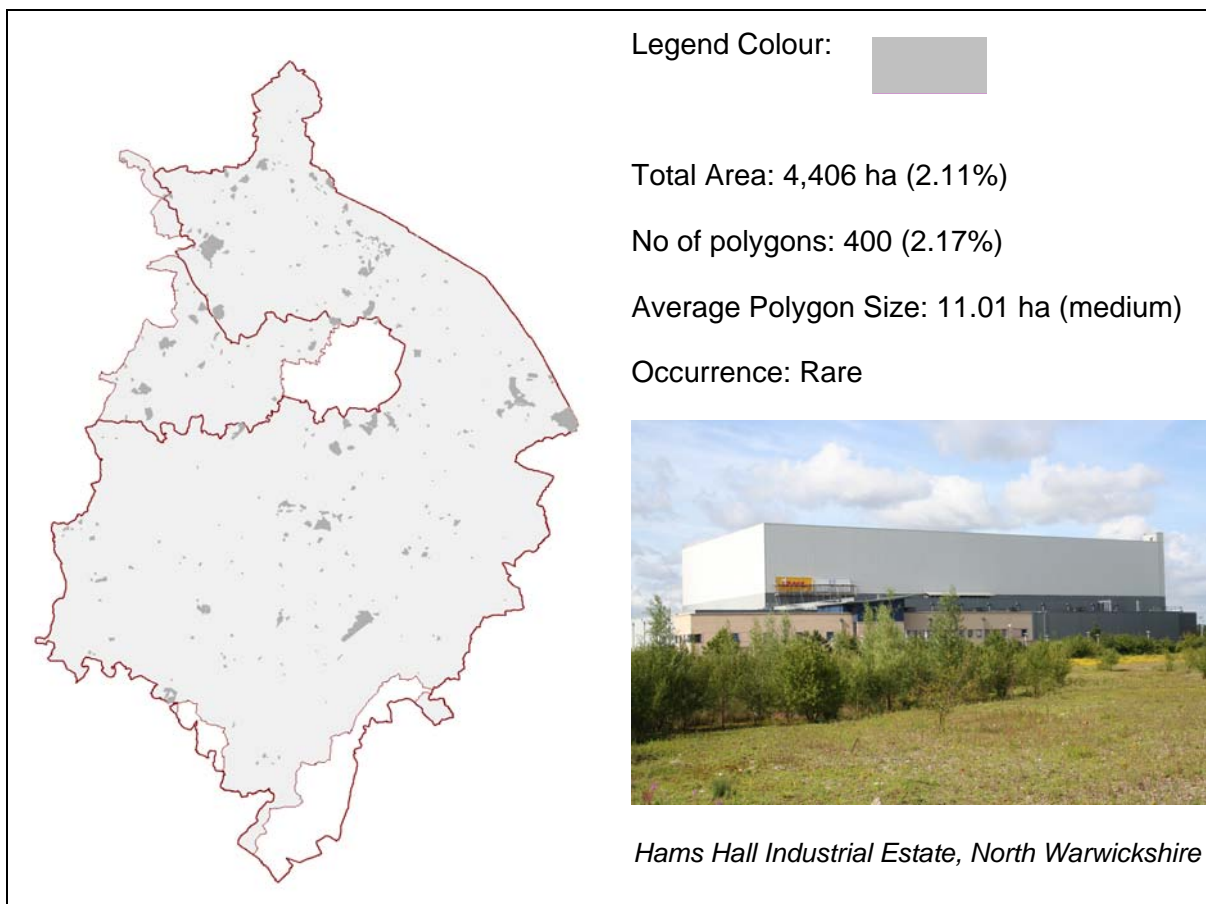
Research:

Research could be done into water management in Warwickshire especially features such as water meadows, about which little is known; indeed until recently none had been identified. Other areas include those archaeological features relating to water and waterlogged deposits.



Draycote Water

Industrial (IND)



Definition:

Areas of land that have been identified as having a predominantly industrial component but which are not related to the extractive industries.

HLC Types:

Industrial Complex, Derelict Industrial Land, Waste Tip, Utilities, Motor Industry, Radio/ Tele- communications

Description:

These are generally split into two types: small industrial areas often associated with villages and larger industrial complexes found in and around the main urban areas of Warwickshire. There is very little industrial activity in the rural areas apart from remnants of industry in the north of Warwickshire.

Historic processes:

The industry that HLC refers to here is from the industrial revolution onwards with extractive industries categorised separately. Specific early industries have

not been identified here apart from brick and tile works that were located throughout the county and were often associated with clay extraction sites. Other pre 1880s industry was often small scale and varied from such things as breweries to metal working. However more prominent industries in Warwickshire include hat, ribbon, needle, glove and comb making (Slater, 1981:99-101). Later in the 20th century particular industries were becoming associated with the area, the dominant one around Coventry being the motor industry. Between the two world wars a large radio-telecommunications area developed east of Rugby. Utility works including gas, water, electricity and sewage works developed from the Victorian period onwards and increased as the population and settlements expanded.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing dramatically (+76%)

Trajectory of Change (1955 – 2001):

Stable (+4%)

Reason for change (1880-2001):

The first half of the 20th century saw a dramatic expansion of industrial areas continuing from the previous century. In the later part of the 20th century this has stabilised although the nature of the industries occupying this land has often changed,

Factors influencing further change:

Increasing industrial activity, partly related to increase of certain industries and growth of settlement/population. Older sites are at risk of demolition and/or redevelopment as traditional industries decline.

Biodiversity Potential:

Low - Little potential for biodiversity due to the nature of industrial sites, however some buildings or margins of these areas may provide some potential. Derelict industrial sites will have a higher potential as species recolonise.

Archaeological Potential:

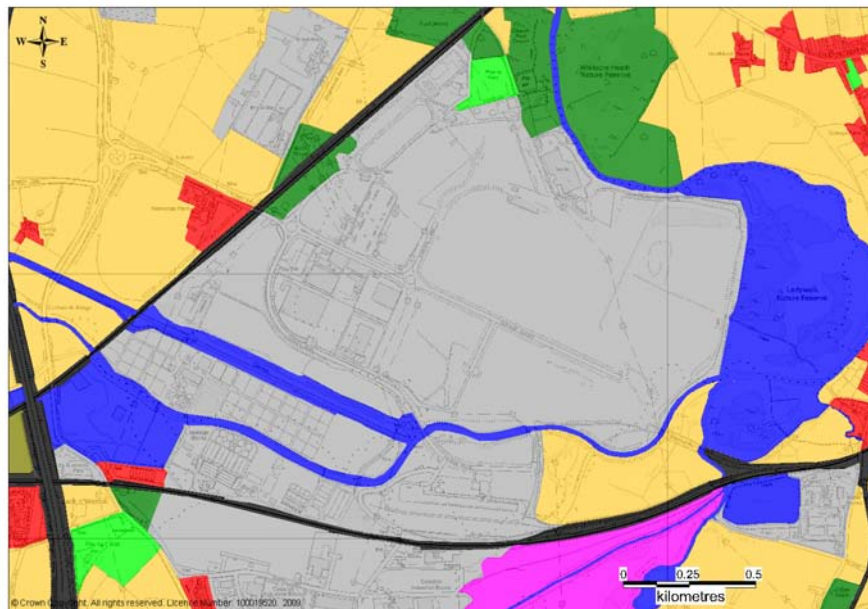
Medium – The archaeology of industrial sites has become increasingly important and later 20th century sites are no exception, often because many of them, such as the motor industry, are in decline. Late 20th century industrial sites are often found on the site of earlier industrial remains.

Management:

Conservation of older and more unique industrial sites or recording of historic features.

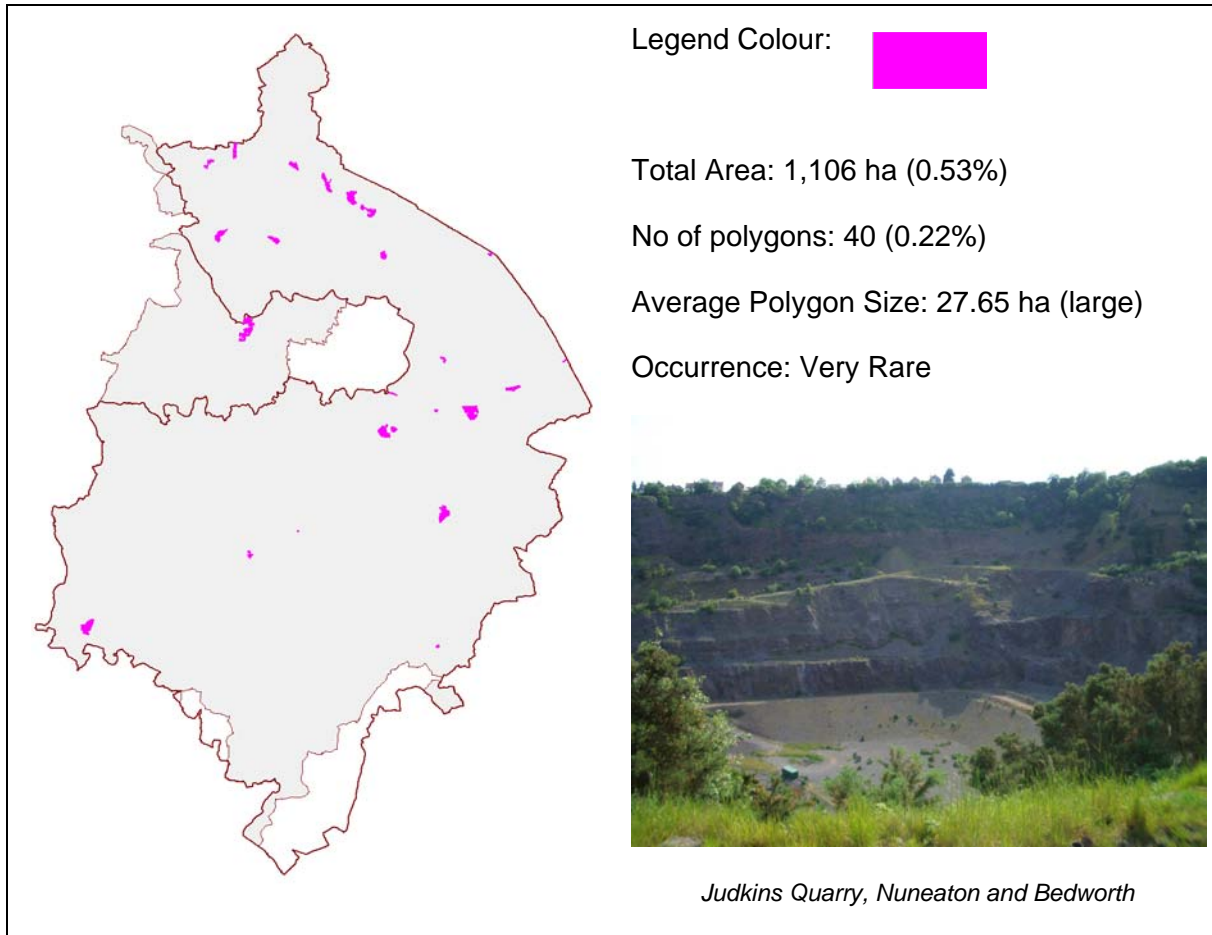
Research:

Historical research has been done in Warwickshire on specific industries such as coal-mining in North Warwickshire and the needle and glove making industry on the Arrow. However little work has been done to draw all this together and look at the archaeological implications. Work by groups such as Association for Industrial Archaeology and Warwickshire Industrial Archaeology Society contributes to archaeological research agenda.



Hams Hall Distribution Centre

Extractive (EXT)



Definition:

Areas of land that have been identified as being related to the extractive industries.

HLC Types:

Coal Extraction, Sand and Gravel Extraction, Hard Rock Extraction, Cement Works

Description:

These are generally large areas located in those areas geologically related to aggregates or economically useful hard rocks. There is a small concentration of hard rock extraction stretching in a band north west from Nuneaton.

Historic processes:

The variety of Warwickshire's geology has led to it providing a number of rocks and deposits that have been exploited over a long period of time. In the medieval period stone was quarried for building while clay was extracted for producing pottery, brick and tiles. Coal in Warwickshire was

extracted from the Roman period onwards and this was continued in the medieval period as surface mining. From the 17th century onwards coal mining extended to deeper mines until the later 19th century when deep shafts were being sunk. Presently only one coal mine (Daw Mill) survives, being one of the most productive in England. Other deposits were exploited on a small scale and from the 18th century stone, clay and marl pits are identified throughout Warwickshire. Larger quarries were formed for Lower Lias Limestone in the south and east of the county. Cement works around Rugby and Stockton expanded from the 19th century and are still prominent today. In the 20th century sand and gravel, hard rocks and clay have been extracted on a massive scale and continue to be extracted. When these large areas are spent the land is often infilled and left as scrub. In the longer term such areas may be farmed or used for other purposes. Some extraction sites have been developed into country parks and water features.

Period:

Medieval - Late 20th century

Trajectory of Change (1880s – 1955):

Stable (-2%)

Trajectory of Change (1955 – 2001):

Decreasing rapidly (-49%)

Reason for change (1880-2001):

In the first half of the 20th century there were still a large number of extractive sites, increasingly concentrated in particular areas rather than the small scale 19th century and early extractive sites. Extractive industry has decreased rapidly in the later 20th century with the focus on extensively exploiting certain targeted areas in the landscape.

Factors influencing further change:

Extracting minerals is a transient activity. Demand for aggregates and coal may increase. Abandoned sites often change to other HLC types.

Biodiversity Potential:

Low - Natural resources are often destroyed during extractive activity. However when activity ceases the biodiversity potential often significantly increases as other uses often include natural regeneration of habitat.

Archaeological Potential:

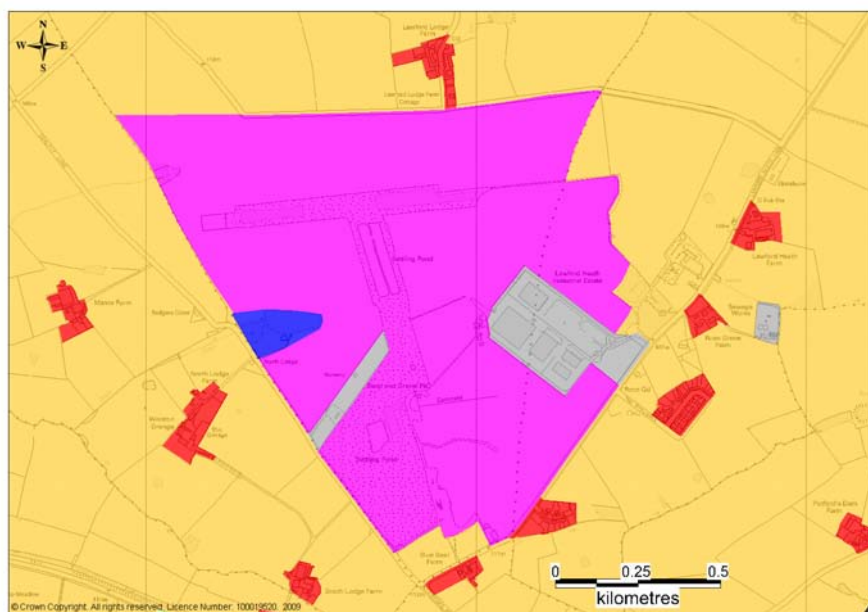
High - Extractive sites often reveal archaeological sites, particularly those of prehistoric origin. Extractive industry also leaves its own archaeological remains.

Management:

The likelihood of encountering potential archaeology prior to extraction needs to be fully considered, and the management of the Historic Environment facilitated through robust and effective minerals development policy. There is a need to develop models for predicting where prehistoric and other buried remains are likely to exist, based on other HLC types. For example, the various enclosed land types, which extractive industry will affect, will have varied potential.

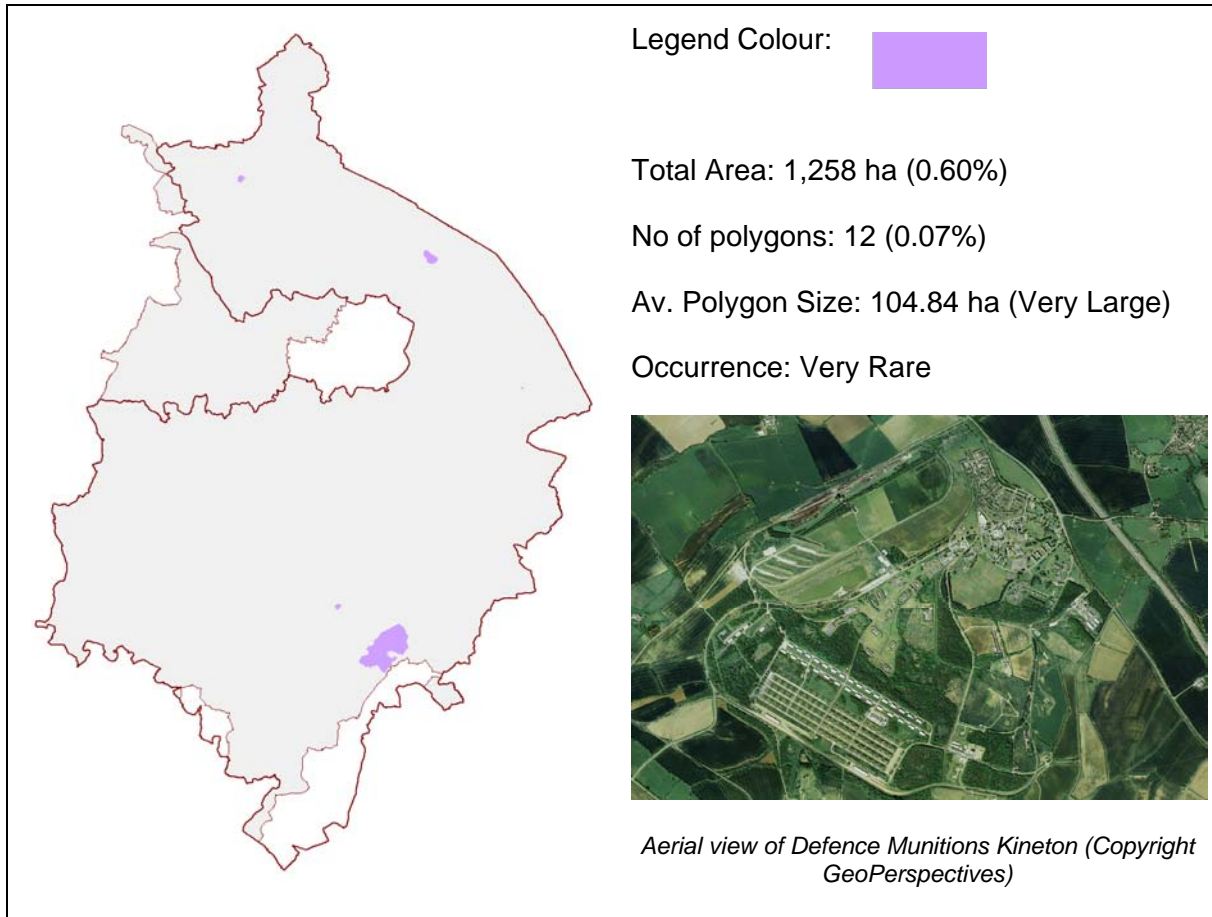
Research:

The ALSF project “Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire” (Alexander et al, 2007) and should be a solid foundation for research into aggregates extraction sites in Warwickshire (especially pp133-144 and pp148-150). For other mineral extraction sites such as coal and limestone (for cement) these research themes and agenda can often apply but if possible specific research topics for these minerals should be written to a similar level of detail as the aggregates areas.



Ling Hall Quarry

Military (MIL)



Definition:

Areas of land that are being used for military purposes.

HLC Types:

Military Sites

Description:

This type is dominated by the Defence Munitions site at Kineton which is over 1000 ha in size. Other areas are present such as Gamecock Barracks and Kingsbury Rifle Range with a small site of the Territorial Army in Rugby.

Historic processes:

Although military sites have a long history in Warwickshire from the Roman period onwards, for the purposes of HLC only 20th century military sites are sufficiently extensive and dominant to have been accounted for. In Warwickshire the evidence and remains of First World War sites are sparse, being limited to a few airfields and barracks. The Second World

War saw a huge development in the county with focus on defending the important factories in and around Coventry. Sites include airfields, depots, camps, bombing decoys and anti-aircraft sites. After the Second World War many of these sites disappeared from the landscape with some airfields remaining while others became commercial and civil airports. During the Cold War some sites were adapted to meet the changing needs of the military. Of note is RAF Gaydon which was a V Bomber base with a nearby atomic bomb store. After the Cold War the last of these sites was turned over to other uses and now only a few military sites remain in Warwickshire, with Defence Munitions Kineton dominating.

Period:

20th century

Trajectory of Change (1880s – 1955):

Increasing dramatically (+99%)

Trajectory of Change (1955 – 2001):

Decreasing critically (-66%)

Reason for change (1880-2001):

Increased in the first half of the 20th century due to the 1st and 2nd World Wars and has subsequently decreased in the later 20th century although there is still a greater area of military sites than in the 1880s, mostly due to the very large DM site at Kineton.

Factors influencing further change:

This HLC Broad Type appears to be relatively stable now with only a few sites, remaining in the county. Increases of this type can come from an increase in military activity or a review and any subsequent changes by the Ministry of Defence regarding their current sites.

Biodiversity Potential:

Medium-High - In Warwickshire the military areas are dominated by DM Kineton which contains a large area managed to improve its wildlife and biodiversity. Other smaller sites may have a smaller potential for biodiversity.

Archaeological Potential:

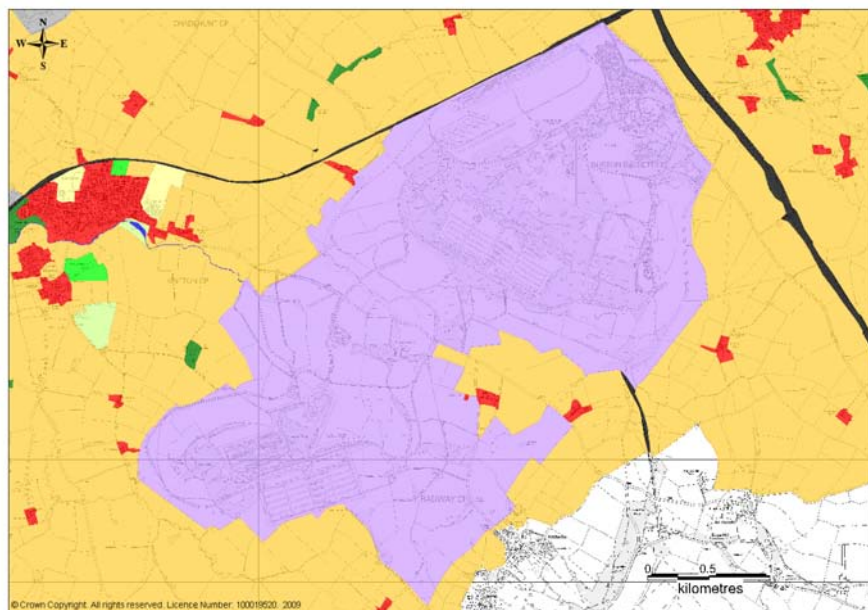
Medium - Despite intense activity by the military these areas often remain largely undeveloped and can contain important archaeological sites, the Edge Hill battlefield being one obvious example for DM Kineton. Military sites themselves are of course archaeological features.

Management:

Archaeological and historic features should be part of any management plan used by the Ministry of Defence for each site. For previous military sites that may be derelict, or have a different use, then any proposed changes should include an assessment of historic and archaeological interest.

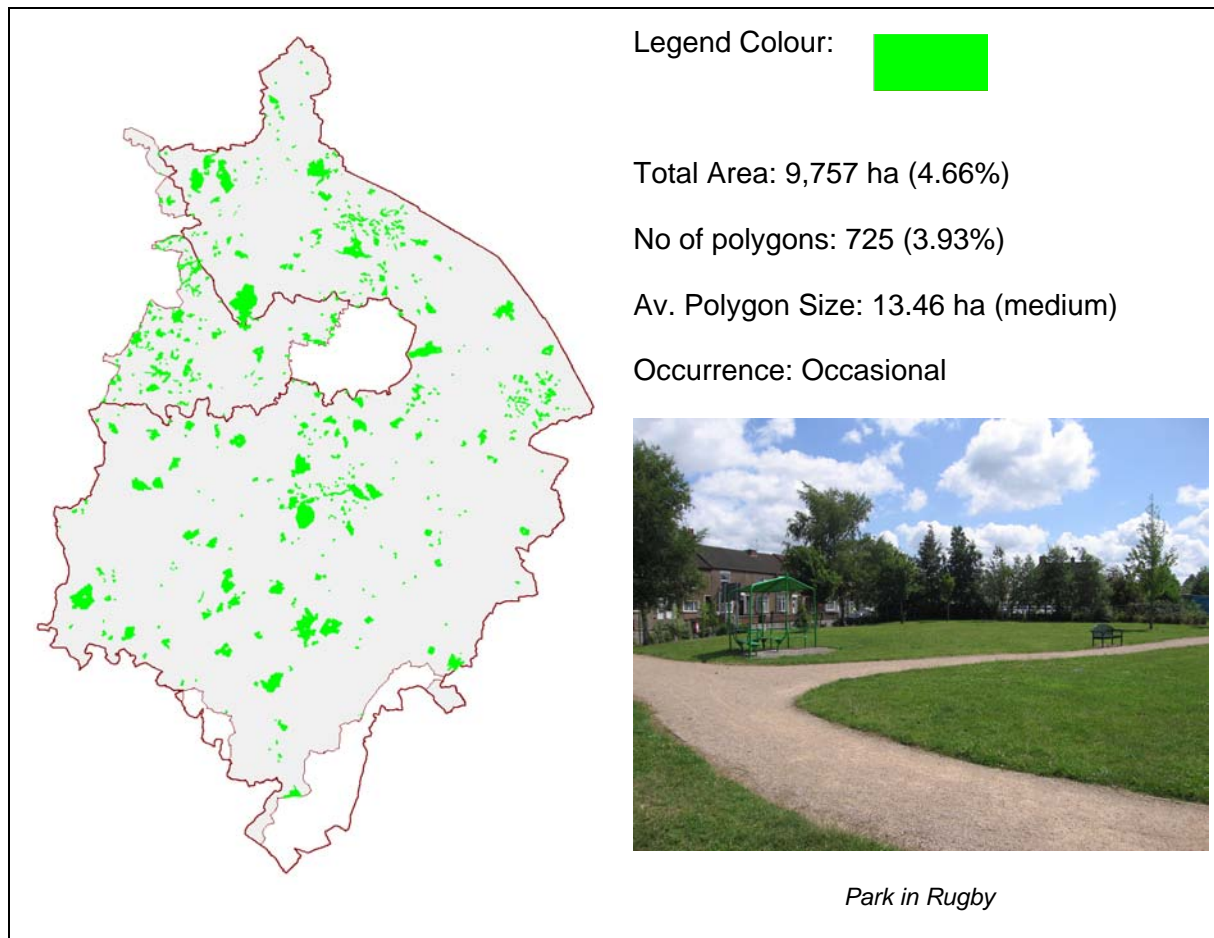
Research:

Comprehensive work has recently been published regarding military sites in Warwickshire (Carvell, 2007). Gaps include First World War and earlier sites, especially airfields. Some work has been carried out at DM Kineton in terms of a desk based assessment (Wessex Archaeology, 2006) and investigation into the battle of Edge Hill, but little is known about the history of DM Kineton itself and how it developed.



Defence Munitions Kineton

Designed Landscape (PAR)



Definition:

Areas of land that have been identified as having a predominantly designed aspect to them including recreational landscapes.

HLC Types:

Park/Garden, Golf Course, Sports Field, Cemeteries, Public Open Space

Description:

This type is scattered throughout the project area with concentrations of small designed landscapes in and around the major urban areas of Warwickshire. Aside from this there are also a number of very large designed landscapes situated in the countryside, some of which are the historic parks and gardens associated with country houses and estates.

Historic processes:

Designed landscapes have existed from Roman times in terms of gardens and ornamental areas of land. In Warwickshire the early evidence is related to the

prominent castles and monasteries and their grounds along with deer parks of which there are numerous examples in Warwickshire. After the dissolution of the monasteries by Henry VIII land was exchanged and manors developed with large country houses and estates. These estates soon developed extensive gardens and later in the 18th and 19th centuries formed whole designed landscapes. In the 19th and 20th century new designed landscapes on a smaller scale developed with smaller parks, gardens, sports fields and public open spaces designed as public amenities. One of the more modern designed landscapes that has had one of the largest impacts, especially in Warwickshire, is golf courses. Ironically, these are often developed on the sites of old historic parks and gardens with the historic manor/country house often forming a club house, hotel or country spa.

Period:

Medieval - Late 20th century

Trajectory of Change (1880s – 1955):

Declining Critically (-79%)

Trajectory of Change (1955 – 2001):

Increasing slowly (+7%)

Reason for change (1880-2001):

The sharp decline in the first half of the 20th century followed a national pattern of reusing many country house designed landscapes for agriculture. The later 20th century saw a small increase in designed landscape, mainly parks and gardens associated with urban areas. There was also an increase in golf courses and other recreational types of designed landscape.

Factors influencing further change:

Large parkland estates could continue to decline and be used for other purposes such as agricultural or recreational land. Increasing population and settlement may demand more designed landscapes especially smaller public open spaces and recreational areas.

Biodiversity Potential:

High - Designed landscapes often contain a variety of species including non-native species.

Archaeological Potential:

High - Parkland and other designed landscapes often contain a variety of archaeological sites and monuments.

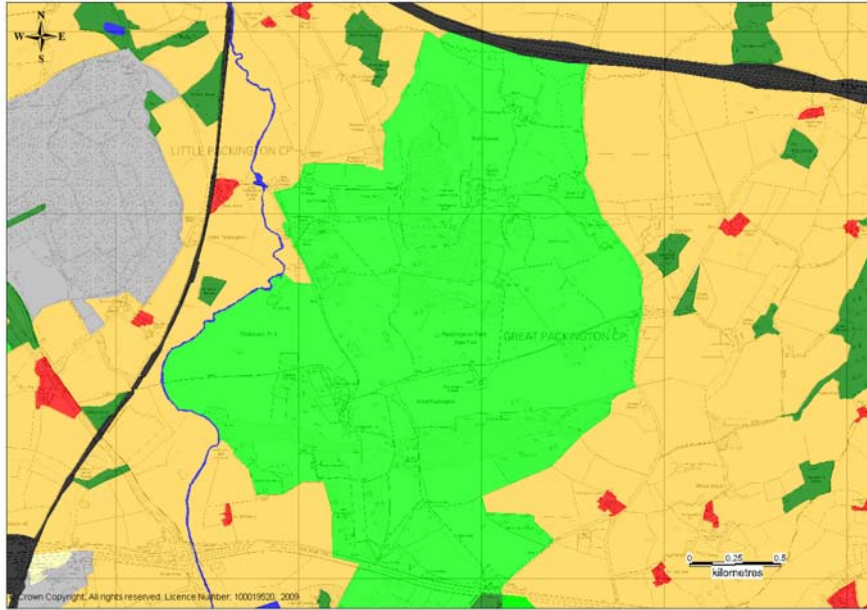
Country houses, estate buildings, deserted settlements and the generally good preservation of remains leads to a high potential for archaeology.

Management:

Conservation of parkland and other historic designed landscapes should be informed by good understanding of the original design (including planting schemes etc). Parkland and older designed landscapes often contain other historic and archaeological features (such as ridge and furrow and deserted settlements) and this should be respected in any management plan for the area. For more modern designed landscapes emphasis should be on incorporating former landscape features into the design.

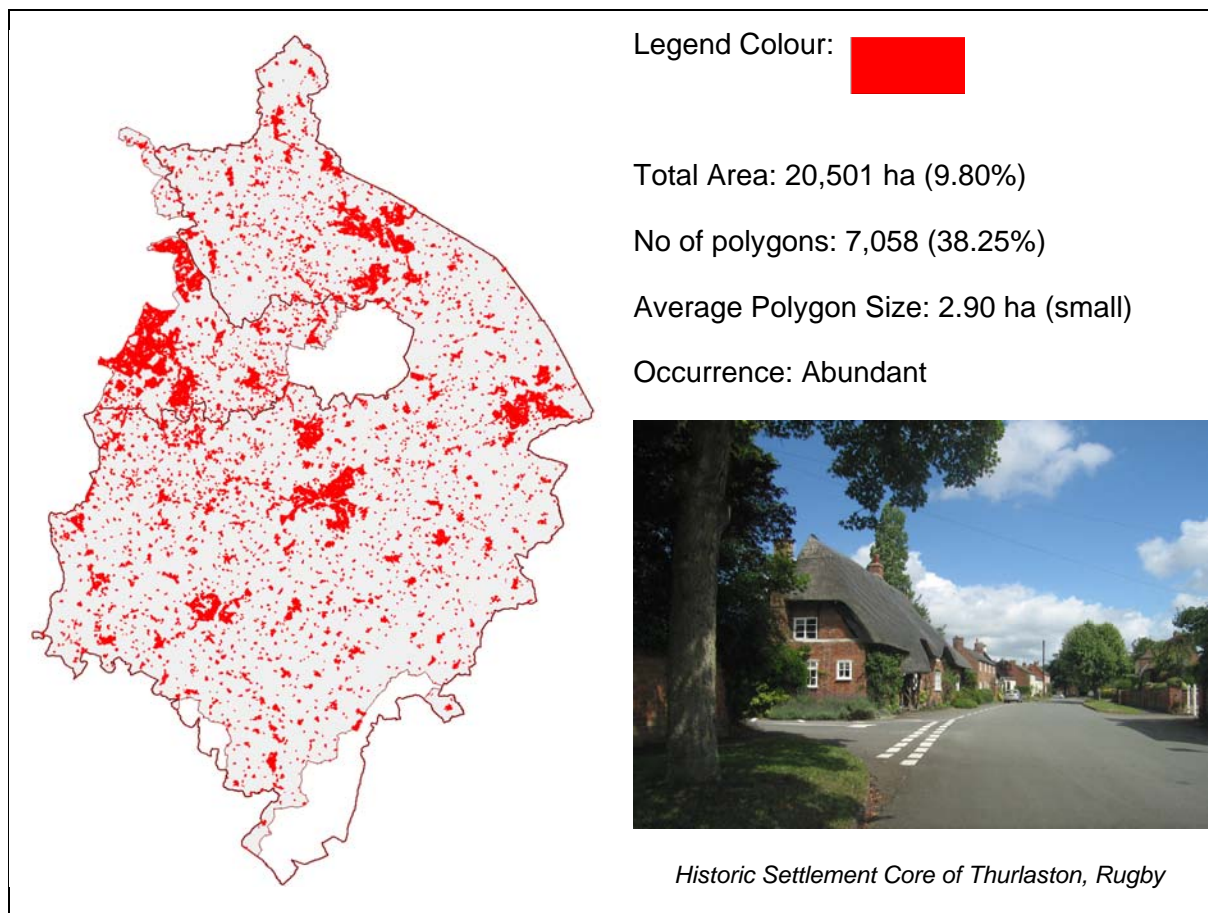
Research:

Much research has been carried out on designed parks and gardens in the landscape although often on an individual basis or looking at one area or topic in particular. Work such as that by Jonathan Lovie, carried out in 1997, could be updated especially following results from the HLC. Less research had been carried out on recreational types such as golf courses, recreational parks and sports fields.



Packington Park, North Warwickshire

Settlement (SET)



Definition:

Areas of land that have a predominantly populated and settled character, this also includes farmsteads.

HLC Types:

Historic Settlement Core, Terraced Housing, Semi-detached Housing, Detached Housing, Farmsteads, Country House, Flats and Apartments, Mobile Home Park

Description:

Settlement in the project area is scattered throughout the countryside with a number of larger urban areas (Warwick, Leamington, Kenilworth, Nuneaton and Bedworth, Rugby, Stratford upon Avon and the urban western part of Solihull Metropolitan Borough) and smaller towns (such as Atherstone, Coleshill, Southam, Shipston on Stour, Polesworth and Alcester). Urban character is complex and can be considered more effectively in the individual HLC Types in Chapter 4 or in

more detailed characterisation work, such as that of Extensive Urban Survey.

Historic processes:

For HLC the development of settlement has only been accounted for from the medieval period onwards. The development of settlement in Warwickshire from the medieval period onwards is complex but as a summary consisted of Warwick as the Shire Town with a number of planned towns, such as Stratford-upon-Avon and Shipston-on-Stour, and larger villages that developed into towns through the medieval period. Smaller villages were scattered throughout the county, with a concentration of medieval moated settlements in the north and west. Later, a large number of settlements were deserted with more desertion occurring in the south and east of the county (Dyer 1996). In the post-medieval period a number of settlements grew, especially in the north, to serve the numerous industries in the area. This expansion continued through to the 20th century when an explosion in population

after the Second World War led to vast expansion in most urban settlements, an expansion that continues today. Warwickshire, being otherwise a rural county, also has small settlements including a number of farmsteads that developed from the medieval period onwards.

Period:

Medieval - Late 20th century

Trajectory of Change (1880s – 1955):

Increasing rapidly (+32%)

Trajectory of Change (1955 – 2001):

Stable (+3%)

Reason for change (1880-2001):

Settlement saw a rapid increase of a third in the first half of the 20th century, mainly from the expansion of larger urban areas and from the growth of the Birmingham conurbation. The second half of the 20th century saw just a small increase in terms of overall area, although there has been redevelopment of urban areas and infilling within housing patterns.

Factors influencing further change:

An increasing population will demand more housing and settlement expansion is inevitable, as recognised in the Regional Spatial Strategy. This will probably be concentrated in the main towns and urban areas in the county but could affect rural settlement too. Some towns may absorb previously detached villages and there will be increased pressure on greenbelt areas from the expansion of Solihull, Coventry and other major urban areas in Warwickshire. Less defined housing types (such as uniform terraced, semi-detached or detached housing) are being produced and a more mixed pattern of housing estates are changing settlement character. Larger urban areas may see increased pressure on un-used Brownfield and Greenfield areas.

Biodiversity Potential:

Low/Medium Some potential from green spaces and gardens in settlement areas. Some species have adapted and thrive in

urban areas such as birds, foxes, bats and some amphibians. The development of Green Infrastructure as an integral part of current spatial planning will also enhance biodiversity. In rural settings villages and farmsteads often support a wide range of wildlife.

Archaeological Potential:

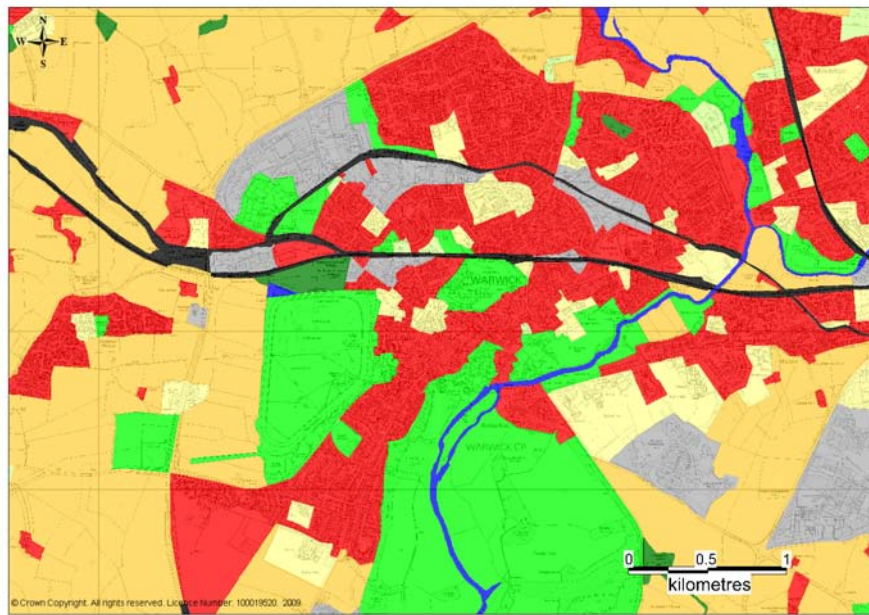
Medium - Archaeological remains are often associated with settlement, especially above ground remains. The potential for archaeology depends upon the more specific HLC Type; for example historic cores of settlement have a higher archaeological potential than more modern settlement that by its nature often destroys archaeological remains.

Management:

Specific management recommendations will depend on each type. In general for all settlement any proposals for major change should include an assessment of the existing historic character of an area and its surroundings, and an assessment of the impact of proposals upon this character. New development should take into account the character of the area in which development is to take place and ensure that the materials used are also in keeping with the surroundings. Historic Environment considerations need to be firmly embedded in Local Development Frameworks and supported by robust and effective policy at both national and local level.

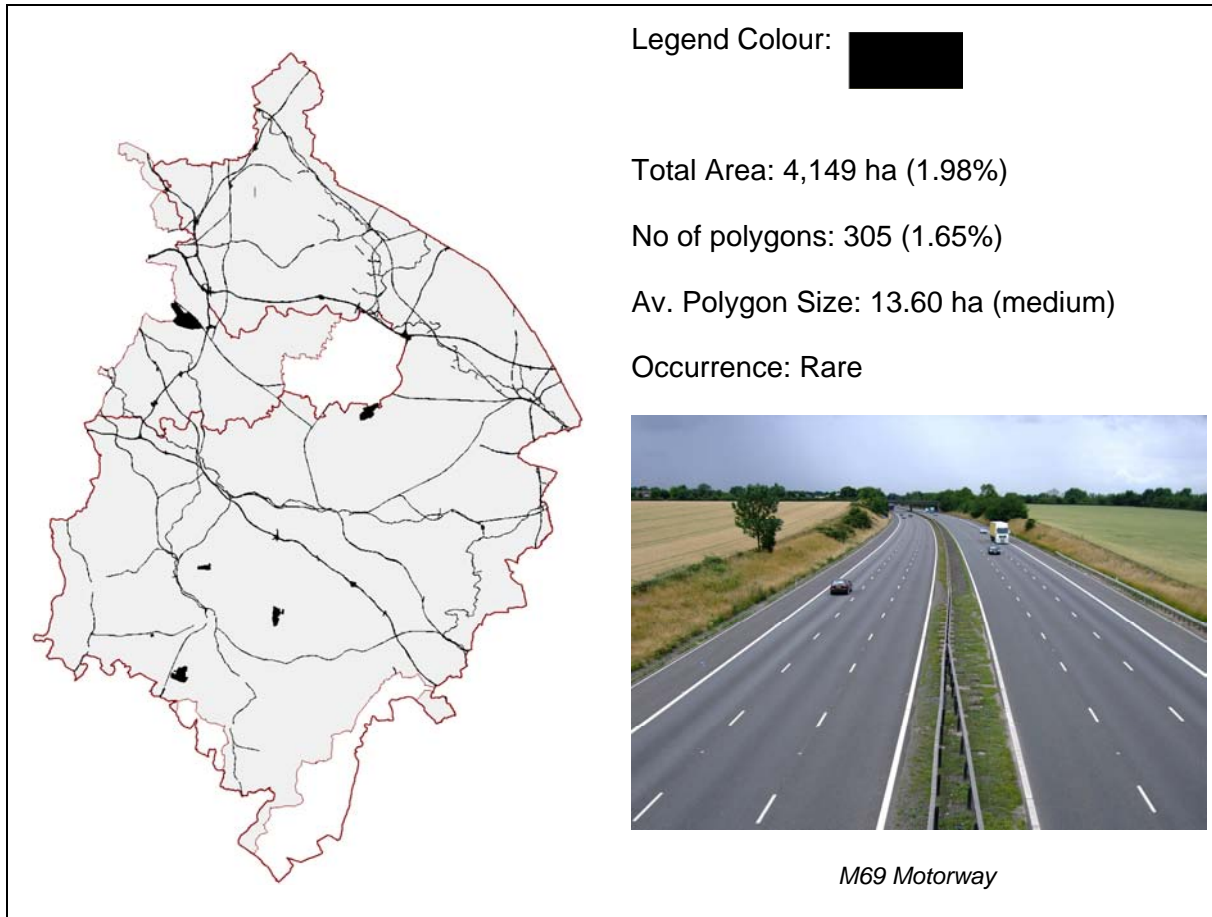
Research:

There are already a large number of national and regional research and study groups related to the study of historic settlements (e.g. MSRG). EUS has yet to be carried out in Warwickshire and is highly recommended after HLC to further understand the major historic towns. A further project has already started looking at Historic Farmstead Character and will be invaluable in understanding historic farmsteads on a local and regional level. Further research could be carried out into later settlement development such as the expansion of the Birmingham conurbation into Solihull and the increase of modern country houses in the later half of the 20th century.



Warwick Town

Transport (TRA)



Definition:

Areas of land that are related to some form of transportation.

HLC Types:

Motorways, Civil Airports, Canals, Railways, Disused Railways, Park and Ride

Description:

The project area is crisscrossed with canals, railways and motorways. Most connect South East and North West England via Birmingham, with some connecting other cities and urban areas. There are a number of airports, mostly domestic and small scale, with Birmingham International dominating.

Historic processes:

Historically, roads were the primary system of transport in Warwickshire; however, only the more modern motorways have been mapped as part of this study. Canals were developed as part

of the industrial revolution. Early contour canals like the Oxford Canal were followed by straighter canals with locks and tunnels. Soon a network was crossing Warwickshire that largely continues to exist today. When railways were developed in the nineteenth century, Warwickshire was again a crossroads between London and Birmingham, with lines linking Coventry, Rugby, Leamington Spa and other major towns. Many of these lines closed in the 20th century with dismantled railway lines still a feature in the landscape. Twentieth century motorways with links between Birmingham, London and the North pass through Warwickshire. Another 20th century phenomenon was the development of civil airports. Two dominate in Warwickshire: Coventry (which recently closed to passenger traffic) and Birmingham International.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing rapidly (+49%)

Trajectory of Change (1955 – 2001):

Increasing slowly (+19%)

Reason for change (1880-2001):

Transport increased in the project area by just under 50% in the early 20th century due to the continued expansion of the railways and the development of civil airports after the Second World War. This has continued to increase slowly in the later 20th century, despite the decrease of railways, largely offset by the development of motorway networks and services.

Factors influencing further change:

The railway and canal network are relatively stable. The biggest pressure comes from an increase in roads, especially in motorway widening and expansion. Pressure on expanding airports has reduced with Coventry recently halting passenger flights, although Birmingham Airport is likely to expand with a further runway. There is also the possibility of a high speed rail line (HS2 or High Speed 2) passing through Warwickshire from London to Birmingham sometime in the next 20 years.

Biodiversity Potential:

Low-Medium. Mainly low although some transportation types have high biodiversity, such as disused railway lines and canals,

Archaeological Potential:

Medium - Modern transport networks such as motorways can be highly destructive,

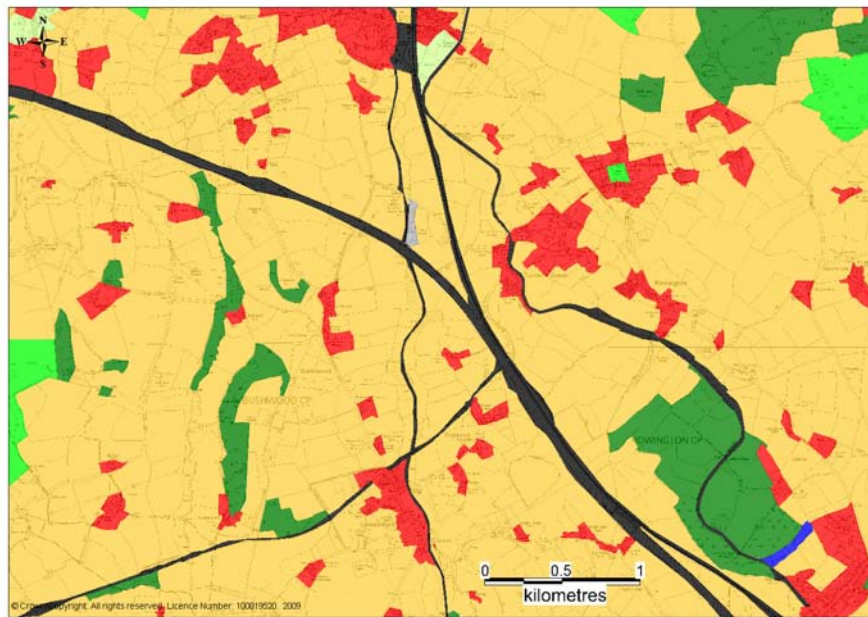
despite the fact that the areas the modern transport networks pass through often have high archaeological potential. Therefore modern transportation has an overall low archaeological potential. However older transportation systems have themselves become of archaeological interest including canals, railways and to some extent airports, especially those with a military background.

Management:

Historic elements of transportation sites (particularly canals, railways and older airports) should be preserved and managed appropriately to respect any archaeological and historic interest. Newer transportation networks such as motorways rarely provide archaeological or historic features to manage, although it may be in the future that motorways themselves form an historic feature that should be appropriately managed.

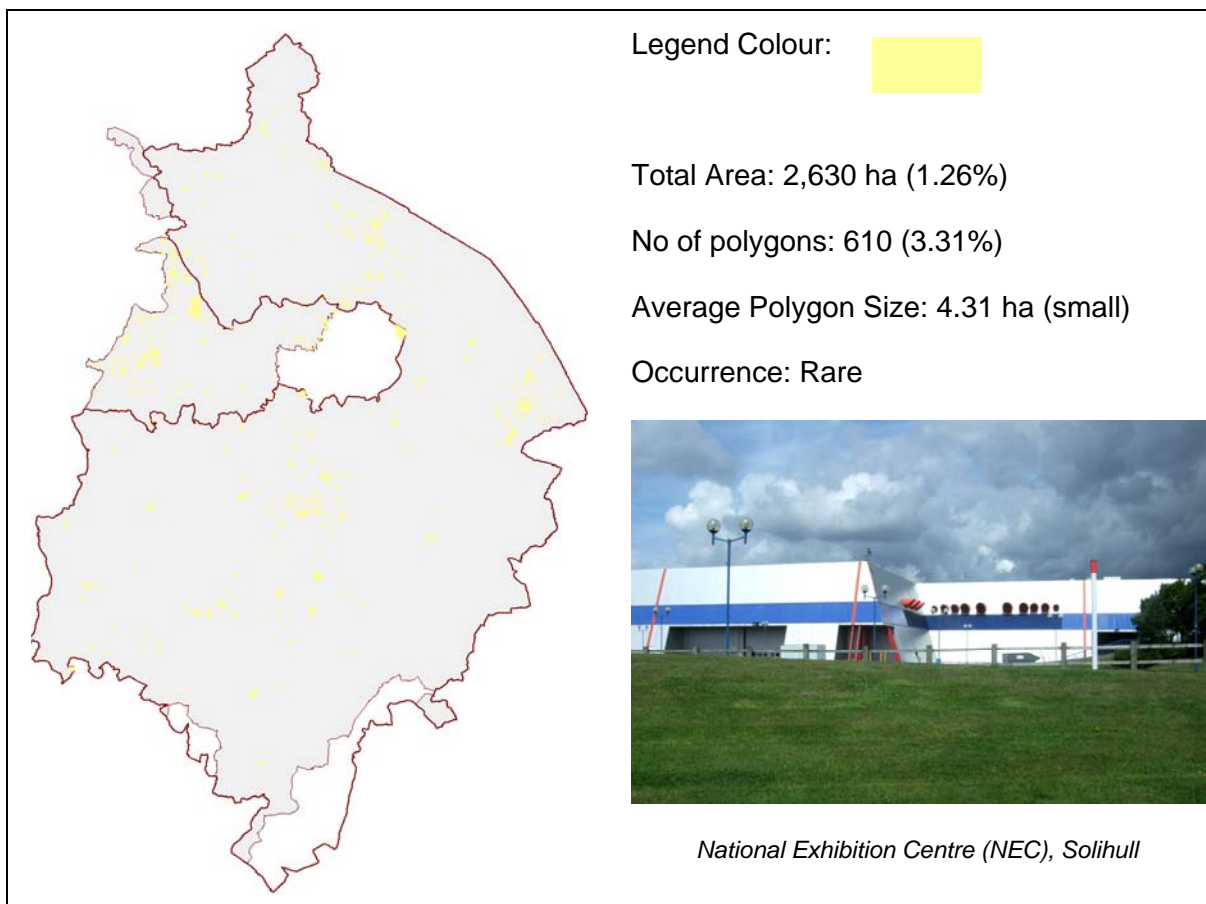
Research:

Research into historic transportation routes such as canals and railways has been carried out previously, especially as part of industrial development. Research on more modern forms of transport such as motorways has only just begun. Some research into historic roads in Warwickshire has already been carried out (Cossons, 1946) but further work could take place perhaps by mapping all historic roads in the HER or as part of a characterisation study. This has been piloted in Buckinghamshire already and further detailed work has been carried out on the Isle of Wight.



Motorway, Railways and Canals between Rowington and Lapworth

Civic and Commercial (CIV)



Definition:

Areas of land that have a predominantly civic or commercial use.

HLC Types:

Stadium/Conference Centre, Camping/Caravan Site, Stadium, Municipal and Civic, Commercial and Retail

Description:

Civic land includes administrative buildings including schools and services, while commercial sites include such areas as supermarkets, shopping centres, retail parks and hotels. These, on the whole, are not unsurprisingly located mostly in the larger urban areas.

Historic processes:

Civic and commercial sites mostly date from the Victorian period onwards, with an expansion related to settlement and population growth in the later 20th century and the development of commercialism

with out of town shopping centres and strategic distribution centres.

Period:

20th century

Trajectory of Change (1880s – 1955):

Increasing rapidly (+90%)

Trajectory of Change (1955 – 2001):

Increasing slowly (+6%)

Reason for change (1880-2001):

This increased dramatically in the first half of the 20th century due to the expansion of settlement. The early post war period also sees an increase in commercial sites. Later 20th century shows a slow increase in line with the small increase of settlement.

Factors influencing further change:

This type reflects the increase of settlement and so pressure will come from increase of population and settlement

expansion putting pressure on more civic and commercial services.

Biodiversity Potential:

Low - Limited biodiversity will exist in these areas due to their nature, however some such as schools have schemes to help promote biodiversity. Other larger civic and commercial areas often have specific areas designed for the natural environment.

Archaeological Potential:

Low/Medium - There are generally few archaeological sites associated with this type and their nature often results in destruction of archaeology. Some older

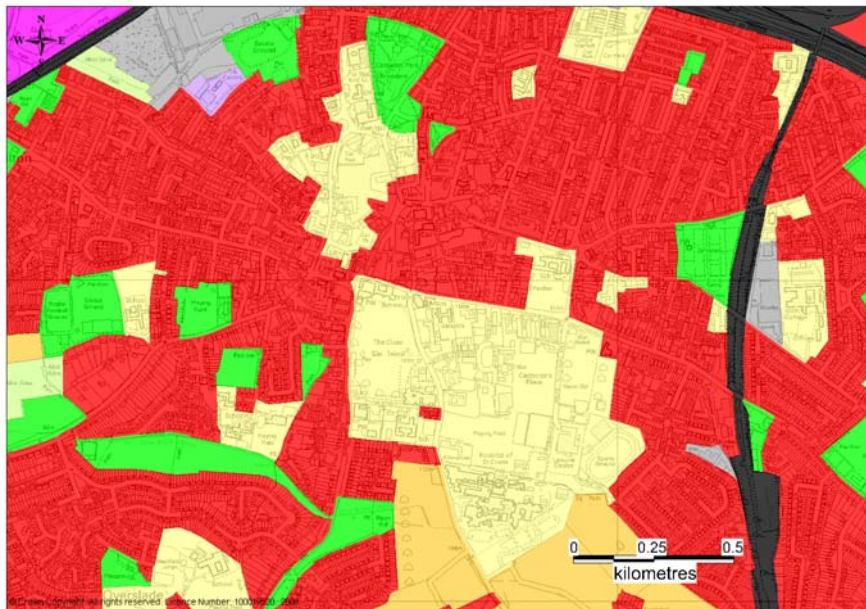
civic buildings have historic interest as well as intact areas of land associated with schools, car parks and camping/caravan sites.

Management:

To preserve or record where possible those older buildings or institutions that are of historic or archaeological interest.

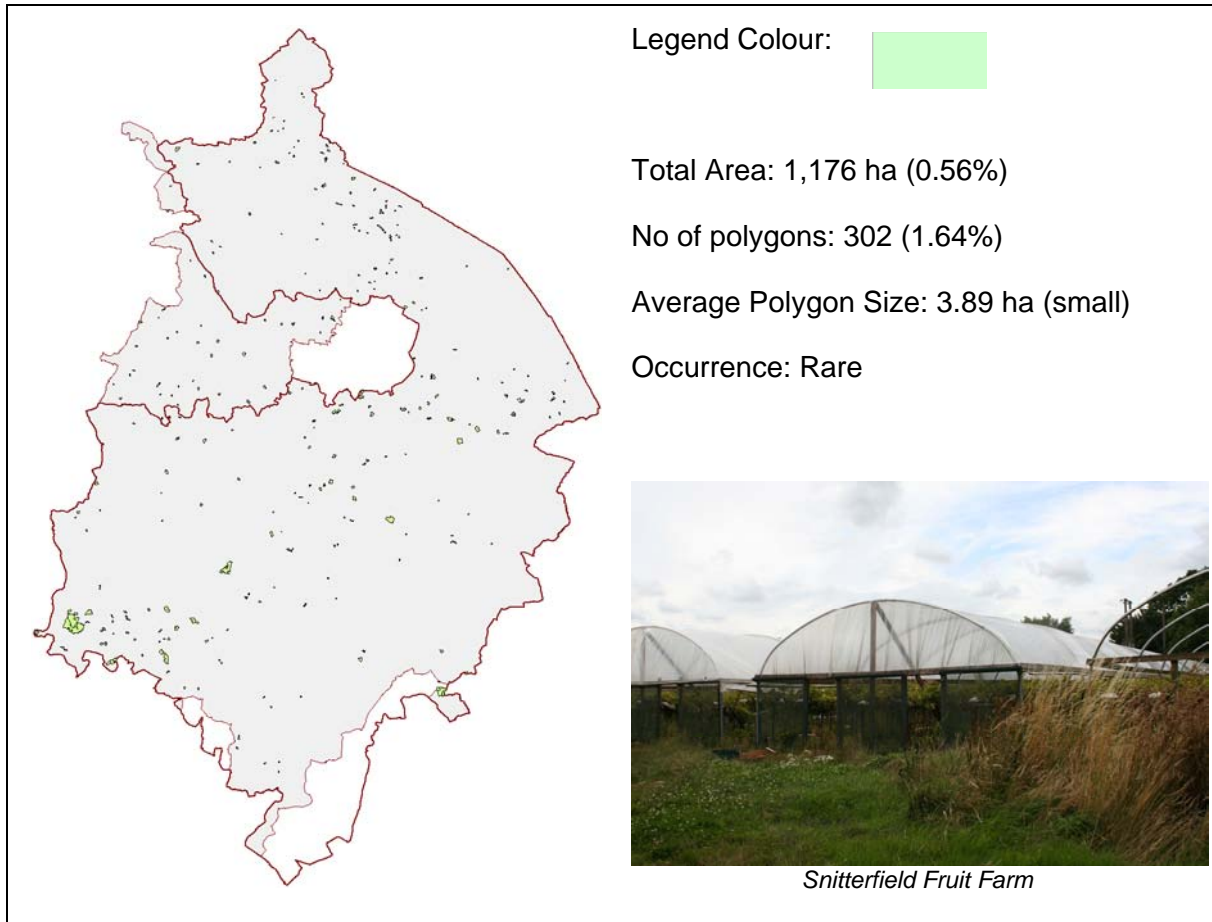
Research:

Research needs to be identified at an individual type level. This may result in proposals for thematic survey.



Civic and Commercial sites at Rugby

Horticultural (HOR)



Definition:

Areas of land that can be identified as some form of small-scale horticulture. This type includes orchards, allotments and more modern nurseries and garden centres.

HLC Types:

Orchards, Allotments, Nursery/Garden Centre

Description:

Orchards are sparsely located throughout Warwickshire with a definite concentration in the south west along the River Avon. There is also a scattering of allotments and garden centres around the main urban areas of the county. With some nurseries being found along the large river valleys of the Avon and Anker.

Historic processes:

The idea of allotments as a concept has developed through history and can be traced back to the medieval period in

England. However, the understanding of allotments here is very much the post-medieval sense of them being small areas of land let out, usually by local government or associations, for individuals to grow their own food.

Some have been identified in Warwickshire in the 19th century but most developed in the early 20th century with a surge around the Second World War. Since then they have declined somewhat although recently they have become more popular and a resurgence could be on the way.

Orchards were a common feature of the medieval landscape (Rackham 1990). However, in Warwickshire there has not been a strong tradition of orchards although most rural settlements had small orchards. On a commercial scale they can be found in the 19th century onwards in the south west of the county with other areas appearing with orchards later in the 20th century. However, the second half of

the 20th century has seen a decline of orchards in Warwickshire.

Nurseries and garden centres are generally a 20th century phenomenon, although some appear to have existed from the Victorian period onwards.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing dramatically (+52%)

Trajectory of Change (1955 – 2001):

Decreasing rapidly (-28%)

Reason for change (1880-2001):

The rapid increase of orchards and allotments in the first half of the 20th century is due to the need for such areas during both world wars along with a small increase in commercial orchards. Since the 1950s this has decreased rapidly following the loss of orchards from the south west of the county and the gradual decline of allotments in general.

Factors influencing further change:

The orchard industry in England as a whole is in decline and the loss of further orchards may happen due to, primarily, lack of profitability in turn due to intense competition from abroad. Allotments have

seen a resurgence at the beginning of the 21st century; although few new areas are created this may stabilise any further decline. Allotments may also be incorporated in the Green Infrastructure of modern expansion. Locally run nurseries are facing increased competition from larger national commercial organisations and may decline further.

Biodiversity Potential:

High - Allotments and orchards have a high potential for biodiversity due to their nature. Nurseries and garden centres less so.

Archaeological Potential:

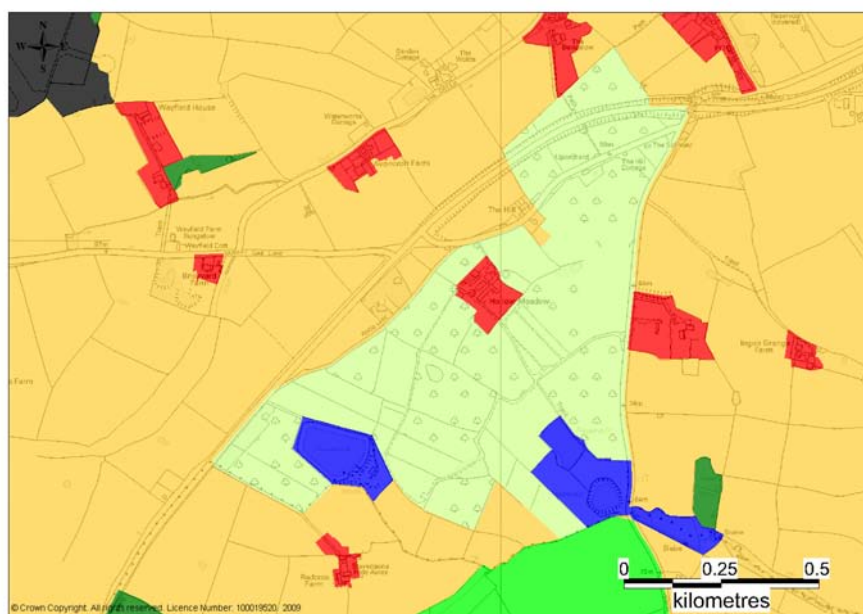
Medium/Low - Some of these HLC types are more destructive to archaeology than others; with allotments, for example, little archaeology remains after repeated digging. Orchards however can offer a higher potential and are often themselves of historic interest.

Management:

Management should be related to the more specific HLC types.

Research:

Little is known about orchard and allotment development in Warwickshire especially in the 20th century, the use of HLC could help address this.



Snitterfield Fruit Farm, Stratford-on-Avon

Chapter 4 - Historic Landscape Character Analysis: HLC Types

Introduction

This chapter analyses the Warwickshire HLC material on a project wide level in terms of 55 HLC Types that have been identified. These HLC Types are made up from 120 HLC Sub-types that were recorded as part of the digitising stage of the project. The full list and summary details of these HLC Sub-types can be found in the HLC Desk Manual (Appendix 3).

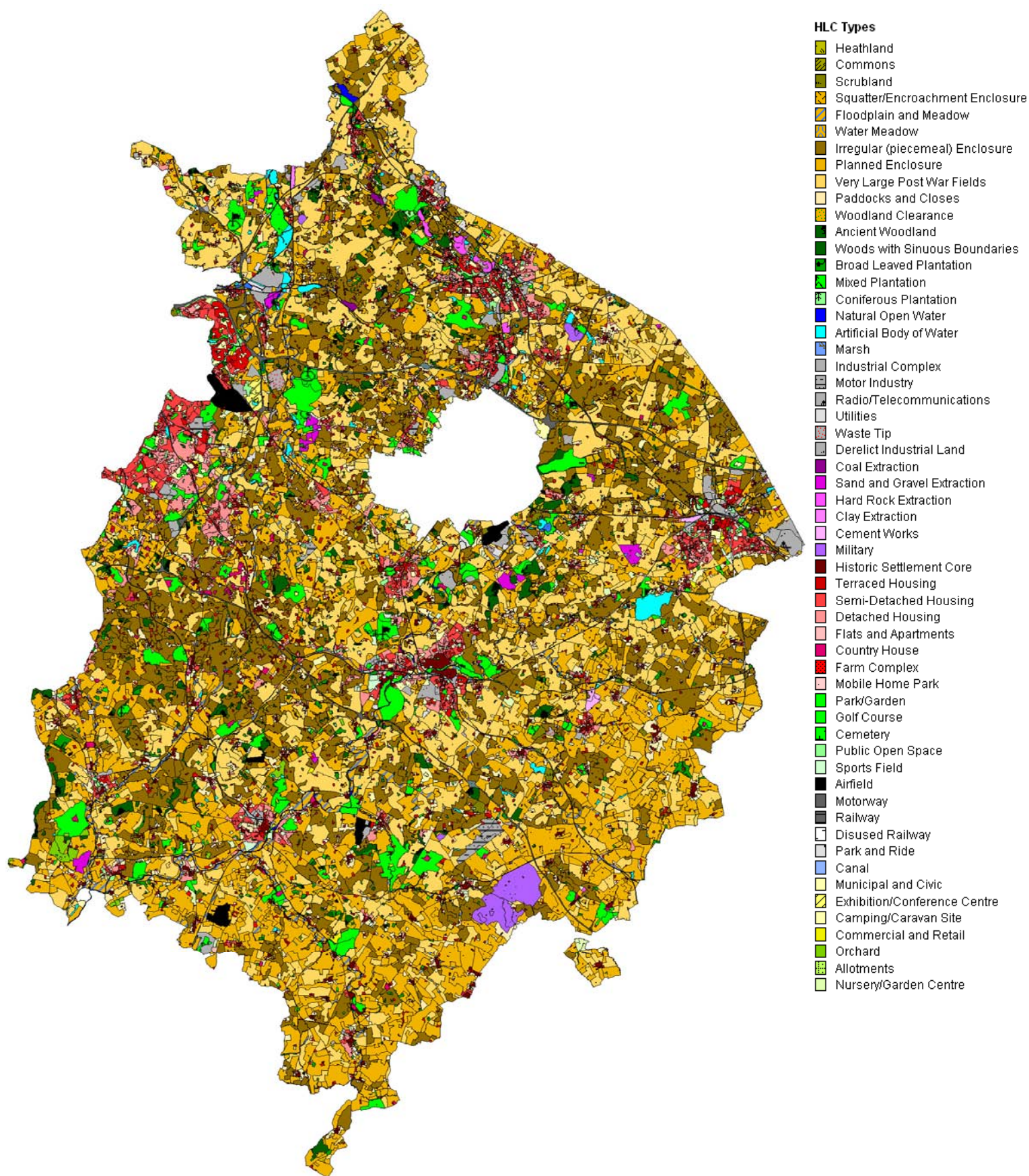
For reference a project wide map of the 55 HLC Types is shown below.

The layout of this chapter broadly follows the previous chapter (Analysis of HLC Broad Types) and all the headings and statistics have been generated in the same way. For reference it may be useful to see the definition example at the beginning of Chapter 3.

Each HLC Type has a summary box showing a project wide distribution map, some key statistics and an example photograph of the type in the landscape. The descriptive headings then follow, including aspects such as change over time, biodiversity potential, archaeological potential, and research and management issues. Finally an example of the HLC Type as mapped is shown.

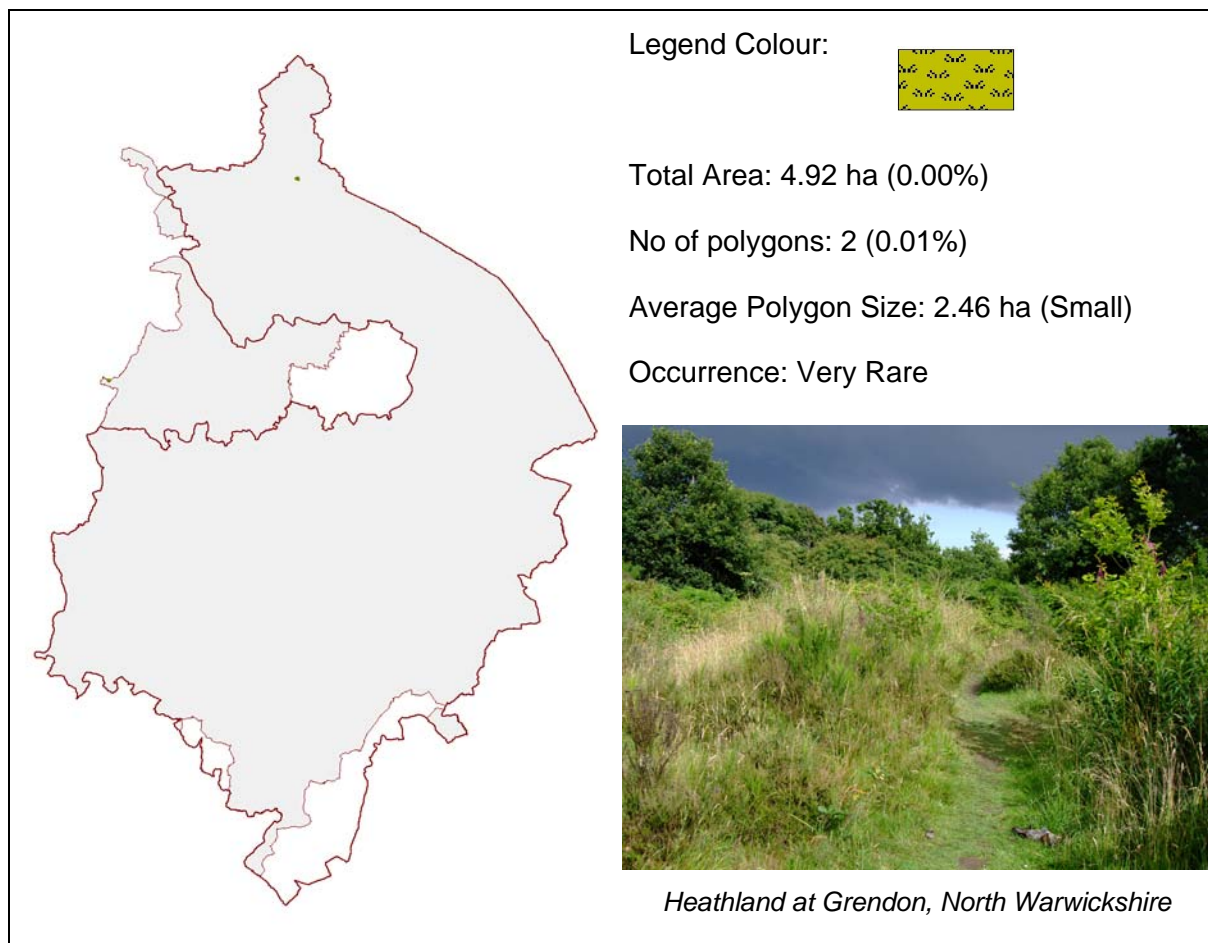
The purpose of this analysis at the HLC Type level is to give a very detailed assessment of each of the identified HLC Types and help users of HLC understand the Historic Landscape Character of Warwickshire at this more detailed level.

For analysis at a district level please refer to the District-wide Analysis Chapter (Chapter 6).



Map of HLC Types

Heathland (1)



Definition:

Areas that have been identified as heathland by English Nature's Lowland Heathland Inventory and by the Warwickshire, Solihull and Coventry Habitat Biodiversity Audit. It is further defined by the UK Biodiversity Action Plan.

Sub-types:

Heathland

Description:

Very little heathland is found in Warwickshire and this HLC type is almost extinct, the last two small examples can be found in Solihull and at Baddesley Ensor. It is mainly found as a previous type forming larger areas that were once heathland, identified from map and placename evidence. The main concentration of these areas was in the Solihull Metropolitan Borough area and at Dunsmore Heath. Other smaller pockets of

heathland have been identified sparsely scattered throughout the county.

Period:

Pre medieval

Trajectory of Change (1880s – 1955):

Declining Critically (-99.94%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

The clearance of heathland continued into the early 20th century and is reflected in the sharp decline, but by the 1950s this process had stopped, mainly due to the almost total eradication of this type.

Factors influencing further change:

The little of this type that is left can easily be lost to surrounding types including settlement, woodland or fieldscapes. It is

very unlikely that any further heathland will be created in Warwickshire.

Biodiversity Potential:

High - This type is a UK BAP Priority Habitat and supports a wide range of species often under threat.

Archaeological Potential:

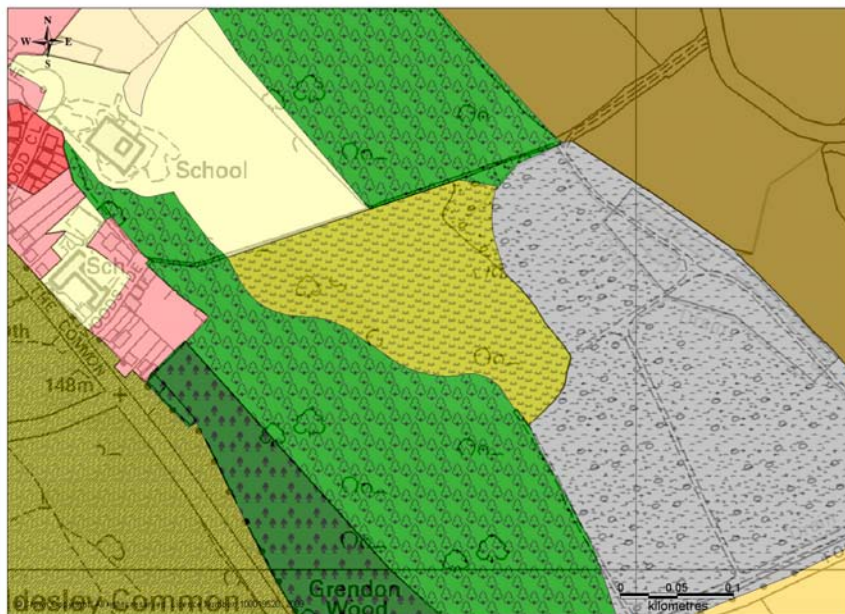
The small quantity of this type in the county makes the archaeological potential difficult to assess. As a previous type however their potential would be medium-high with cropmarks, industrial sites and moated sites on the edge of these areas.

Management:

The potential for restoring heathland should be explored. The few remaining areas should be protected as far as possible from any further change. Ecological management may be most appropriate.

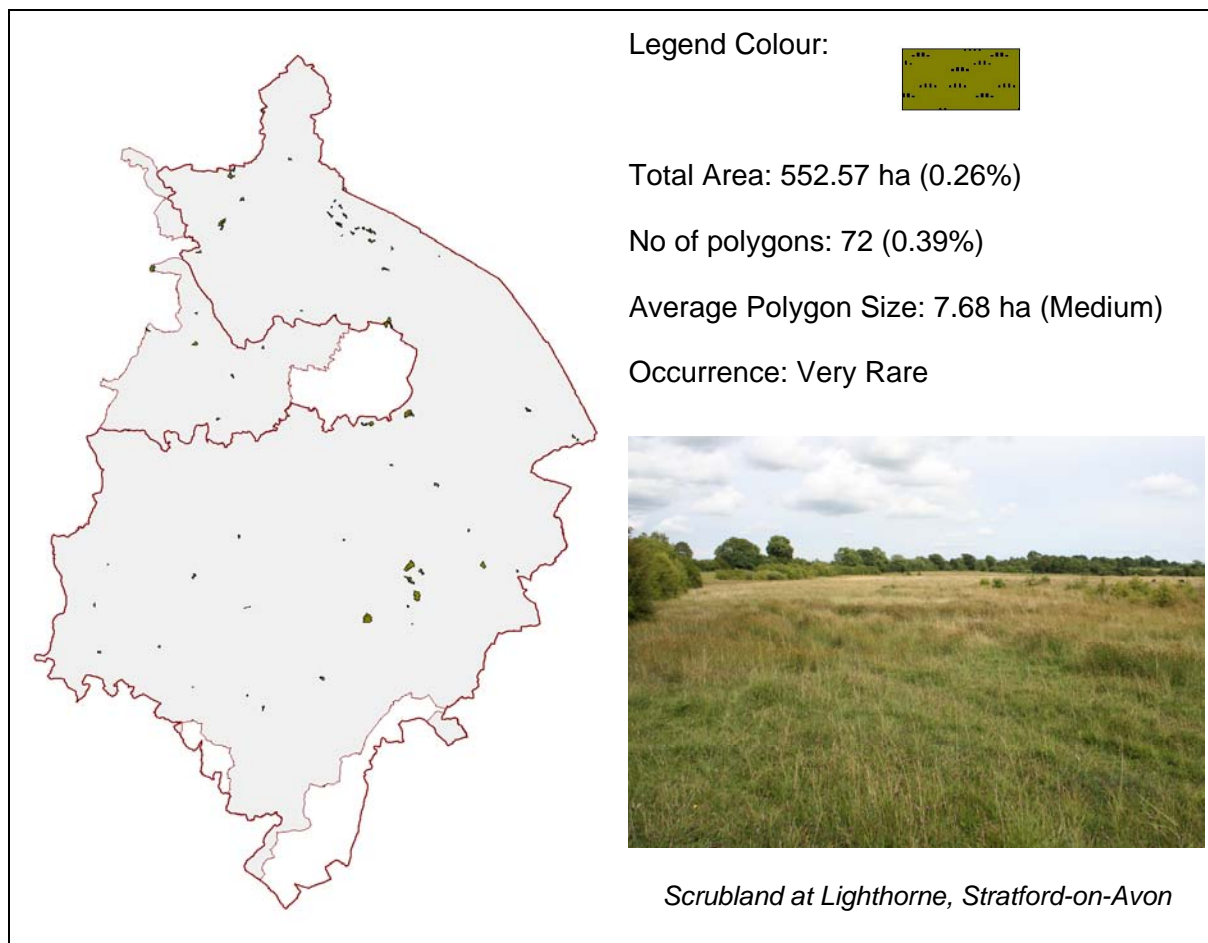
Research:

The previous extent and history of heathland in Warwickshire is not fully understood. The relationship of heathland with commons and the later developing settlements and industry is another area that is not well understood in Warwickshire.



Small area of heathland (centre) at Grendon, North Warwickshire

Scrubland (117)



Definition:

Areas of unimproved land that do not fall into any of the other categories. These are generally areas of scrub where the landscape, geology, soil type or other factors have left the land unusable.

Sub-types:

Scrubland

Description:

Very little scrubland is found in Warwickshire. Most is sparsely scattered and is the result of modern minerals extraction where the land has been in-filled and scrub naturally develops while the land is not actively used. Some of the scrubland identified as a previous HLC type also relates to minerals extraction but here there is a wider scattering across the county that is not yet fully understood.

Period:

Possibly medieval or earlier but most of the recorded scrubland appears to date to the post-medieval - late 20th century.

Trajectory of Change (1880s – 1955):

Increasing Rapidly (68%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (7%)

Reason for change (1880-2001):

The increase in the 20th century of this type appears to be related predominantly to the extractive industries where, since the minerals are exhausted, the land is often left to form scrub. This process appears to have slowed in the second half of the 20th century, probably due to the shrinking of the extraction industry in Warwickshire and the policy of reusing the land for other purposes after extraction has taken place. This reuse now often takes the form of woodland, reversion to

agricultural land, designed parks or other amenities.

Factors influencing further change:

This type is usually an intermediary between extraction, filling and then another use of the landscape, sometimes for settlement, parks, nature reserves, woodland creation or reversion to farmland. The amount of new scrub or loss of current scrub will depend on post-extractive use of minerals sites.

Biodiversity Potential:

Medium - Generally this type will be less managed than other areas and will have a greater variety of species; however, if left for a long period of time this can degenerate into a few species dominating and reducing the potential for biodiversity.

Archaeological Potential:

Low - the potential for these areas is similar to extractive types; however, most

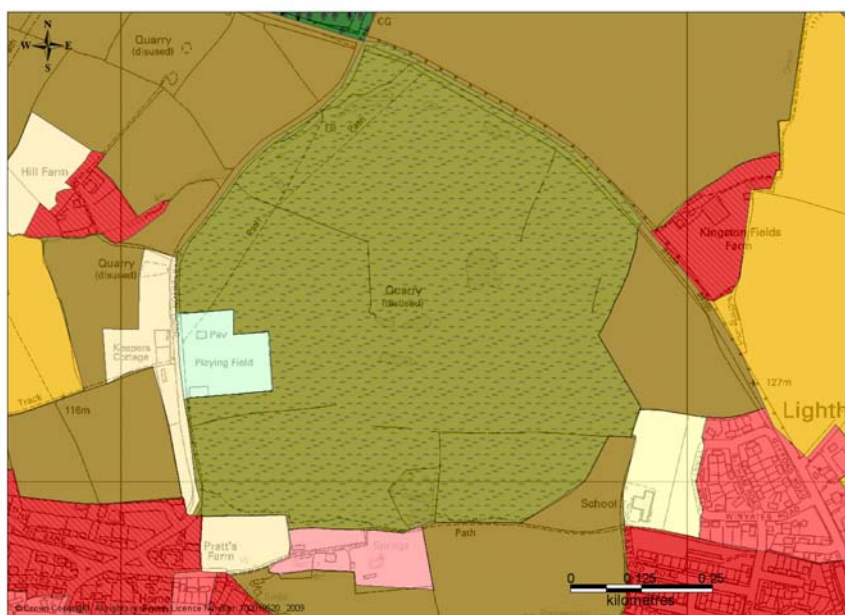
of the archaeological remains will have been destroyed. There is some potential for pockets or strips of archaeology to remain that were not quarried and these would include prehistoric and some industrial remains.

Management:

This type has considerable potential for positive change, ideally informed by a good understanding of any particular site's origins. Some have good potential to be managed for biodiversity (including controlling invasive species). Others might benefit from landscape enhancement, such as restoration of a previous landscape type or types.

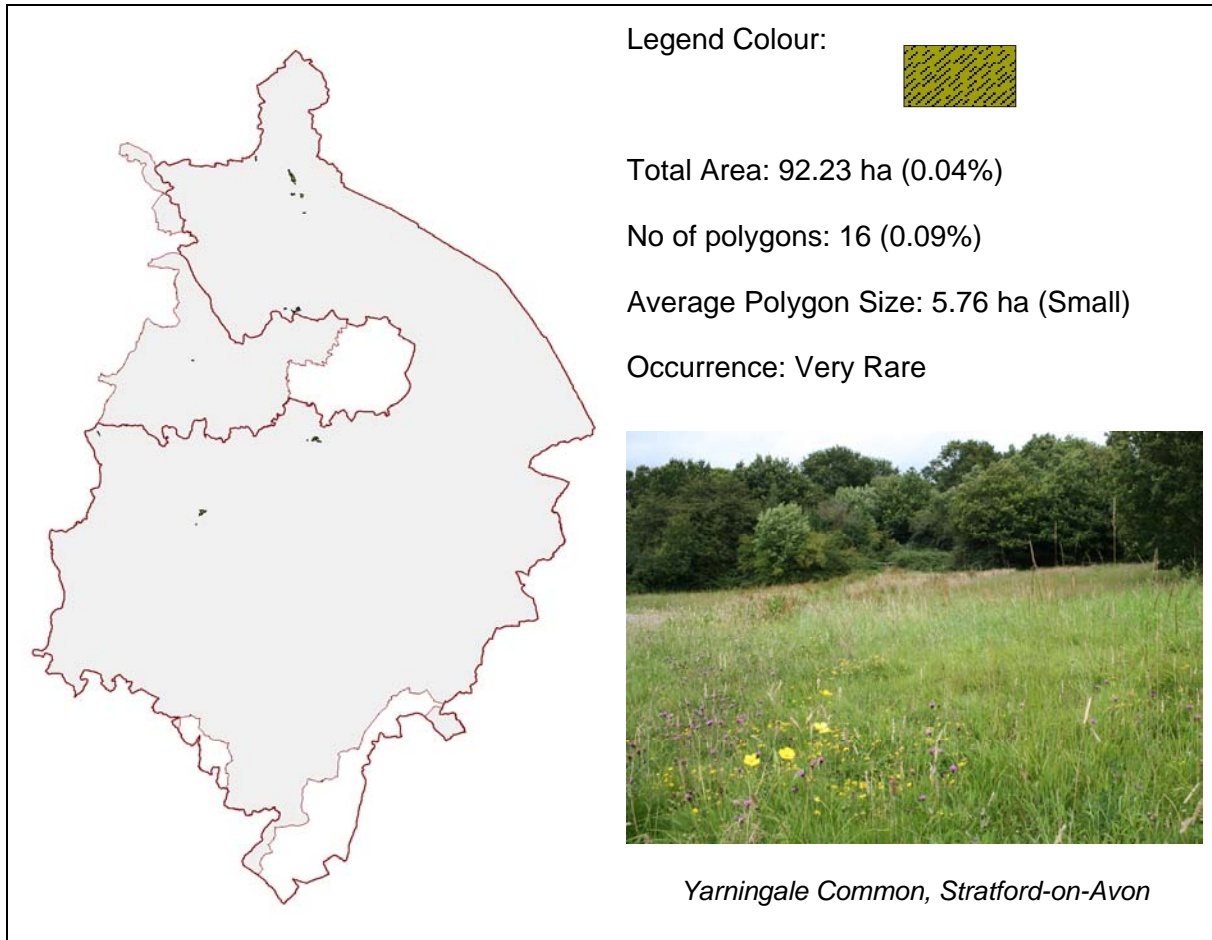
Research:

This type is generally a modern development on a range of former types: research will therefore typically be confined to the history of particular sites rather than to scrubland as a type.



Scrub at Lighthorne, Stratford-on-Avon

Commons (2)



Definition:

Areas of common land identified on the Countryside Agency's National Registered Common Land Map (2000) or other common land marked on OS maps that does not fall into the other categories.

Sub-types:

Commons

Description:

Very little common survives and is mainly found as small pockets in North Warwickshire, Solihull and the northern part of Warwick and Stratford-on-Avon Districts. In the medieval and post-medieval periods it formed a much larger area and is mainly found as a previous type recognised from map and placename evidence. The main concentration of common appears to have been in an area forming part of Solihull and the northern part of Warwick and Stratford-on-Avon Districts, with a further concentration at the

very eastern edge of Birmingham. These formed large contiguous areas of common and had small settlements on the edge later encroaching directly onto it.

Period:

Medieval - Modern

Trajectory of Change (1880s – 1955):

Declining Critically (-99.71%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (355%)

Reason for change (1880-2001):

The sharp decrease of common land in the early 20th century is probably related to the land being gradually drawn in to be used for other purposes. In this case the area around Solihull formed the largest area of common and this is the area that has experienced the largest settlement expansion in the 20th century. The

surprising increase of common in the later 20th century appears to be related to the increasing awareness and protection of common land and subsequently the better recording of it in the landscape.

Factors influencing further change:

Settlement expansion, woodland creation and enclosing fields from the common are the biggest threats to this type. Common land is not expected to increase further in the future.

Biodiversity Potential:

Medium-High. Generally this type is less managed than other areas of land and as such has a higher variety of plant species and subsequently animal species.

Archaeological Potential:

High - The nature of this type means they are generally quite archaeologically and historically sensitive. They are associated with settlement and industry and their lack

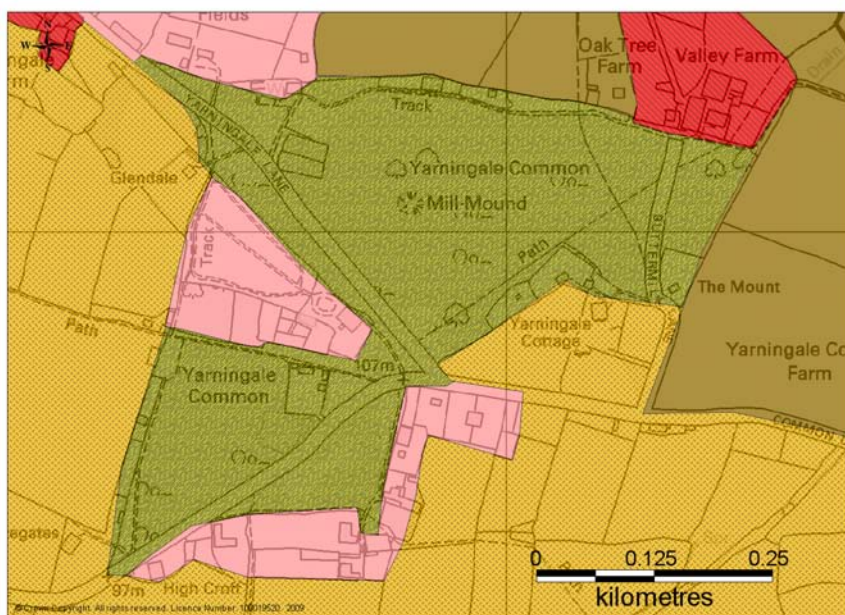
of cultivation means a greater potential for surviving archaeological deposits. As a previous type they are often on the edge of medieval settlements, small industrial sites, cropmarks and moated sites.

Management:

The potential for restoring commons should be explored. Existing commons should be appropriately managed with emphasis on maintenance of grassland and control of invasive species or scrub. Any historic or archaeological features should be appropriately managed. Development is one of the least preferred options for these areas.

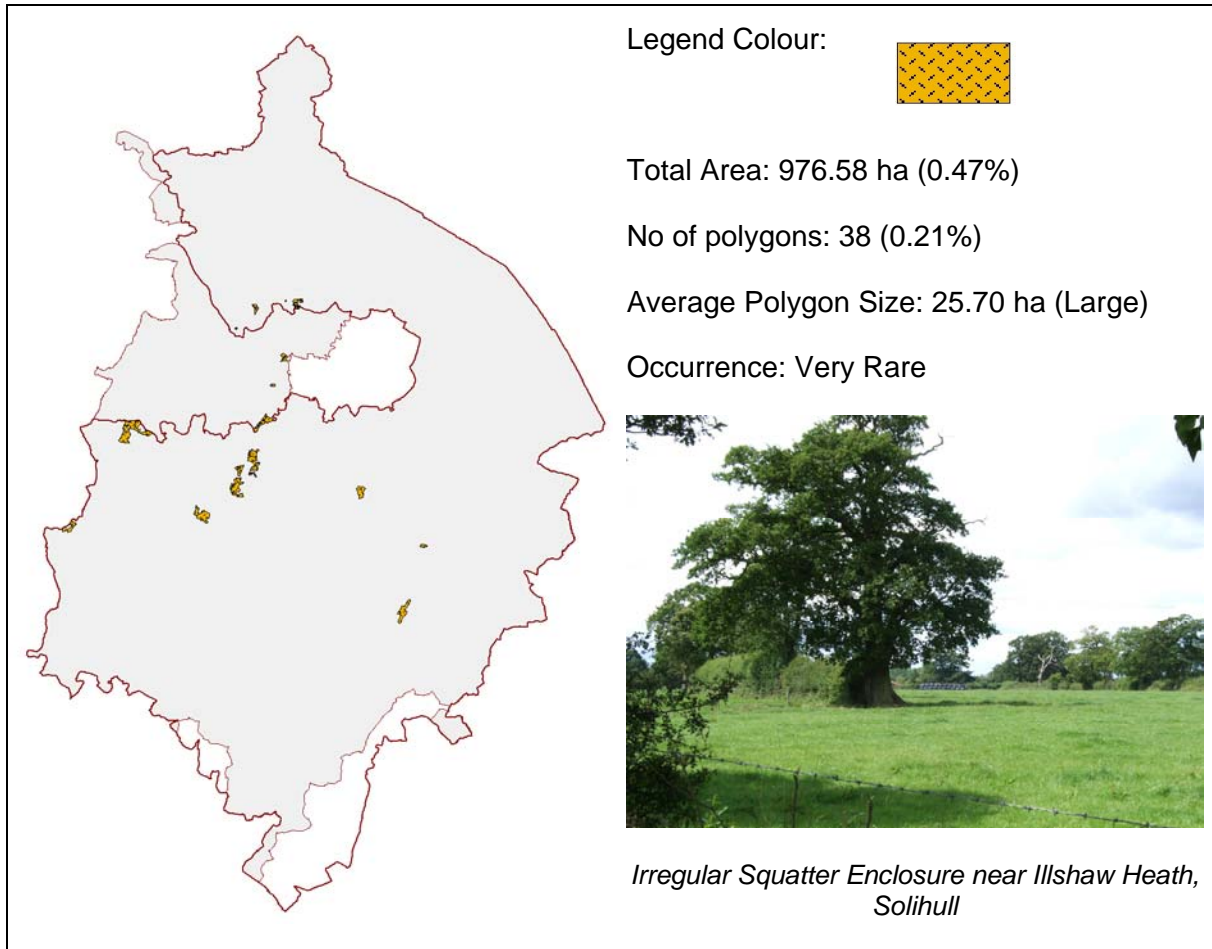
Research:

The exact extent of commons in the medieval period onwards and their later development is not well understood in Warwickshire. Their relationship with the surrounding landscape and the urban and industrial areas could be explored.



Yarningale Common, Stratford-on-Avon

Squatter and Encroachment Enclosure (9, 10, 11,)



Definition:

Small irregular or rectilinear fields usually with an unordered appearance predominantly with sinuous or curvilinear boundaries. They are usually associated with networks of lanes, access tracks or small cottages and quarries, mining or other industrial activity; however, they may also appear as encroachment onto common land without any close proximity to any settlement or industry.

Sub-types:

Rectilinear Squatter Enclosure (9):

Small rectilinear fields usually with a more ordered appearance and predominantly with straight boundaries. They are usually associated with networks of lanes, access tracks or small cottages and quarries, mining or other industrial activity.

Encroachment Enclosure (10):

Small rectilinear or irregular fields that appear to have been encroachment onto common land in the post-medieval or later periods; however, they are not in close proximity to any settlement or industry

Irregular Squatter Enclosure (11):

Small irregular fields usually with an unordered appearance, predominantly with sinuous or curvilinear boundaries. They are usually associated with networks of lanes, access tracks or small cottages and quarries, mining or other industrial activity. They are often indicative of encroachment onto common land in the post-medieval or industrial periods.

Description:

There is very little squatter or encroachment enclosure left in Warwickshire. What little remains is found mainly in the northern part of Warwick and Stratford-on-Avon districts with a smaller

scattering across Solihull Borough. Not surprisingly, this type is closely related to the location of Common and Heathland and as such once formed a much larger area when the common and heath was gradually enclosed as small settlements and industry encroached upon it. One area where this is a complete lack of evidence for squatter or encroachment enclosure is the Dunsmore Heath area. This would suggest that a different process of enclosure was applied rather than through small settlement or industrial encroachment.

Period:

Medieval- post-medieval

Trajectory of Change (1880s – 1955):

Declining Critically (-76%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (19%)

Reason for change (1880-2001):

This type of enclosure is specifically associated with common and heathland and the sharp decline of this type in the early 20th century reflects the decline of the common and heathland in Warwickshire. The small increase in the later 20th century is not easily explained but may relate to better identification.

Factors influencing further change:

Settlement expansion and the re-organisation of field patterns and boundaries could affect the survival of this type.

Biodiversity Potential:

Medium - These fields and hedgerows by their nature tend to be more established, have a longer history and can potentially be more species rich.

Archaeological Potential:

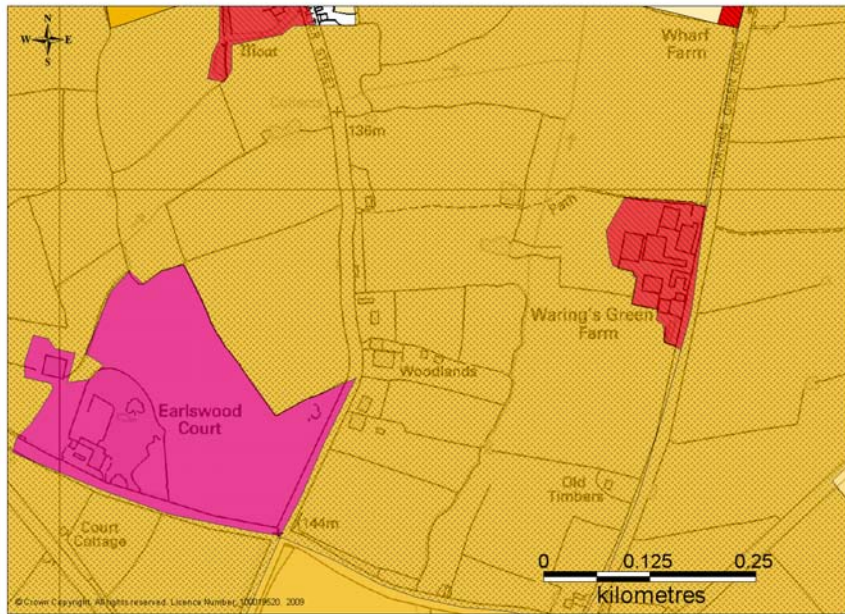
Medium-High - Small industrial sites, small post-medieval settlements and some moated sites are found close to this type. These areas are often found up to the edge of Deer Park boundaries. Some of the previous areas of this type are found either close to or directly related to medieval settlement, suggesting that this type of enclosure could date back to this period. Lack of archaeological sites suggests that the known potential for examination of these areas has not been fully realised, especially for the prehistoric period.

Management:

Maintain the field pattern, road pattern and boundaries. Revert to pasture if possible to protect any archaeological and other historic features.

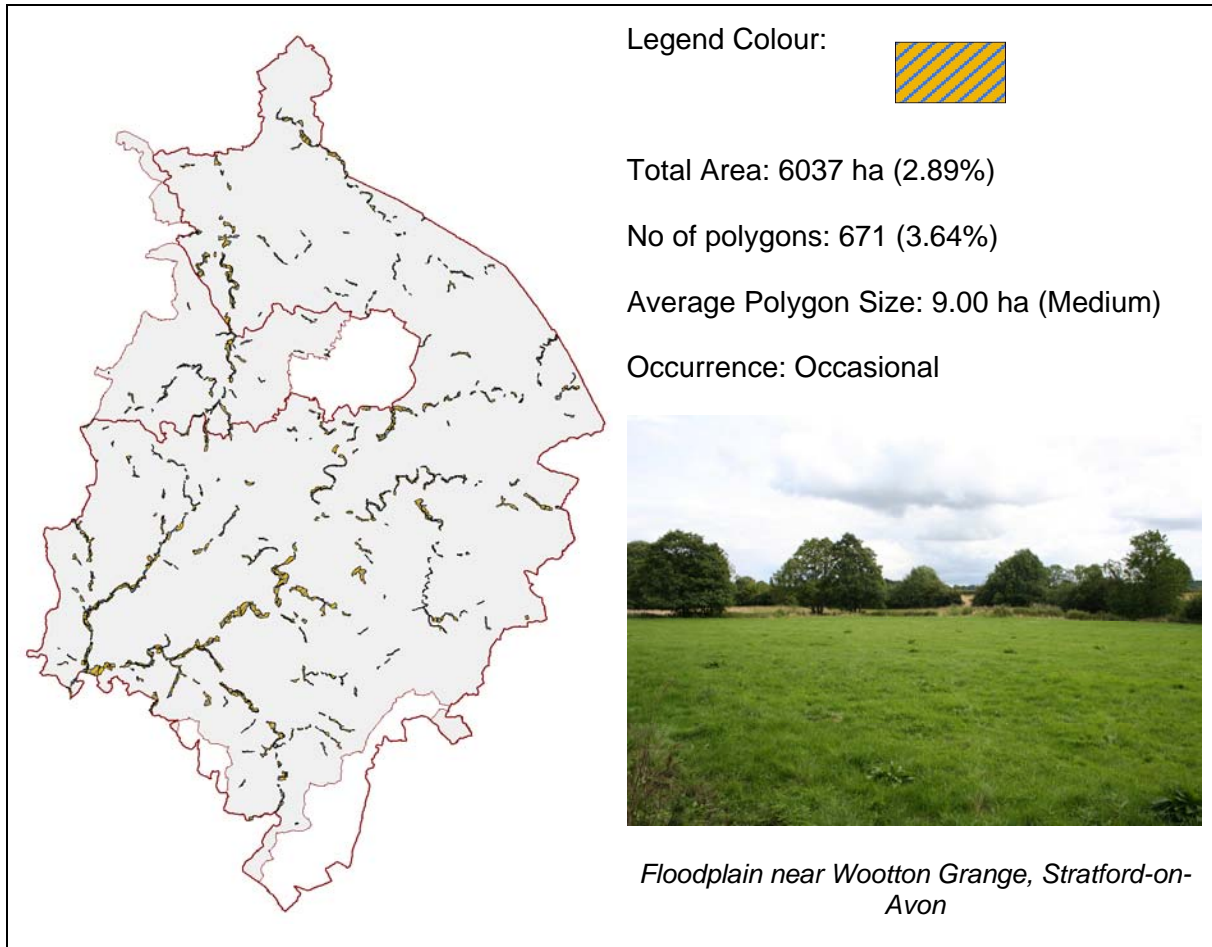
Research:

The origins and early development of this type needs to be better explored. It may be possible to map the development of this type of enclosure more accurately from pre 1880 tithe, estate and other detailed maps. The link between this type of enclosure and small scale industrial sites could be investigated.



Irregular Squatter Enclosure at Illshaw Heath, near Solihull

Floodplain and Meadow (108, 116)



Definition:

Areas of land that are recognised as regularly flooding or at risk of flooding or areas of grassland, often near a river, that are permanently covered with grass which is alternately grazed and mown for use as hay. These generally take the form of long thin fields with sinuous boundaries running alongside rivers, brooks and streams.

Sub-types:

Meadow (108):

A piece of grassland, often near a river, permanently covered with grass which is mown for use as hay. Generally these are found as long thin fields with sinuous boundaries alongside rivers, brooks and streams.

Floodplain (116):

Areas of land that are recognised as regularly flooding or at risk of flooding from nearby rivers, brooks or other water

courses. Often this land is used as meadow.

Description:

This type survives well in the county although there has been a decrease since the end of the 19th century. Floodplain is usually found alongside the main rivers and brooks. Meadow is not very well represented, mainly because such a precisely defined land use is difficult to determine away from the floodplain areas. Some floodplain has been exploited in Warwickshire in the 20th century for other uses; most of this lies within urban areas and now forms types such as settlement and civic amenities like parks, allotments and sports grounds. Other floodplain that has changed has been more intensively used in agriculture, where land that once flooded regularly was probably left as meadow; this is now used for arable farming. A few areas of floodplain are now wooded, the site of sewage works or have

been exploited for sand and gravel extraction.

Evidence was found during the course of the HLC project for previous Water Meadows in some of these floodplain areas. Although none survive into use today these have been recorded as previous types in the HLC.

Period:

Medieval

Trajectory of Change (1880s – 1955):

Declining Rapidly (-23%)

Trajectory of Change (1955 – 2001):

Stable (-1%)

Reason for change (1880-2001):

The sharp decline in the early 20th century appears to be due to the more intensive use of land in floodplain areas. This use is predominantly for agricultural purposes but also for woodland, settlement, industry and sand and gravel extraction. There also appears to be a decline of meadows although this is less pronounced. In the later part of the 20th century this decline has ended and the extent has stabilised.

Factors influencing further change:

Sand and gravel extraction. Creation of industrial estates. Conversion to other types of enclosure for agricultural use.

Biodiversity Potential:

High - Meadow and floodplain areas are often species rich.

Archaeological Potential:

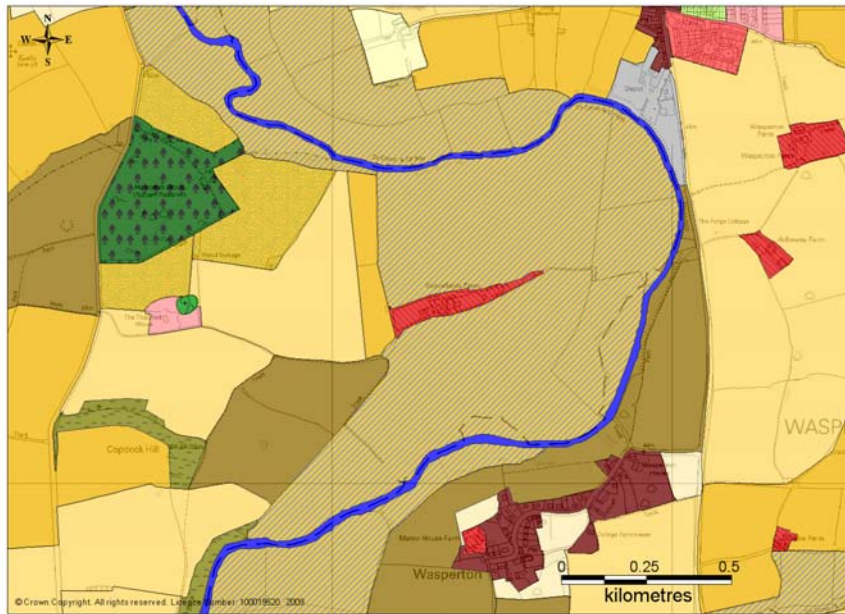
High - Meadows and floodplain area are associated with a wide range of archaeological features including water management features such as water meadows and water mills as well as historic bridges. These HLC areas were often incorporated into designed landscapes. Prehistoric and Roman settlement and features are often close to the present day floodplain. These areas are also more likely to contain waterlogged archaeological deposits. There is a strong correlation between archaeological sites recorded on the HER and river valleys and floodplains.

Management:

Ensure a stable environment and the maintenance of water levels. Retain boundaries and revert to pasture where possible.

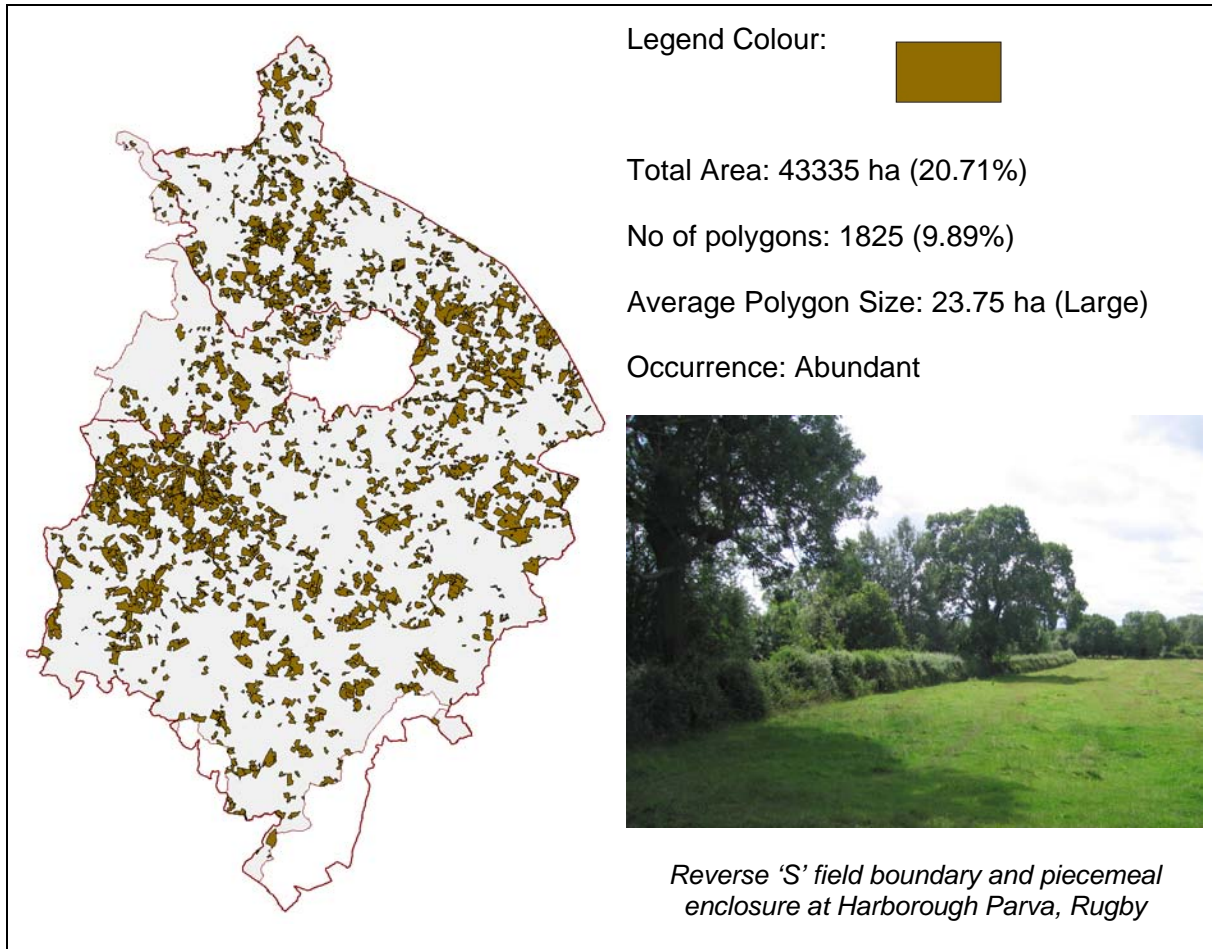
Research:

The distribution and function of meadows are the least understood aspect of this type especially away from the floodplain area.



Floodplain of the Avon near Wasperton, Warwick

Irregular (piecemeal) Enclosure (12, 13, 14, 15)



Definition:

Irregular enclosures. Some are formed piecemeal with curvilinear boundaries that often have a reverse 'S' or dog-leg morphology. These often represent field systems that have been created out of the medieval open fields by informal agreement. Others are irregular fields with straight and curvilinear boundaries that may have been created from the medieval through to the modern period.

Sub-types:

Small Irregular Fields (12):

Small irregular fields which cannot be assigned to one of the other historic landscape character types. Includes small meadows and closes not occurring next to settlements.

Large Irregular Fields (13)

Large irregular fields with a number of sinuous boundaries which cannot be

assigned to one of the other historic landscape character types. Includes enclosure patterns created through the amalgamation of fields since the publication of the 1st edition OS mapping.

Piecemeal Enclosure (14)

Field systems that have been created out of the medieval open fields by informal agreement. They appear to have been established on a field by field basis and often are small irregular fields with at least two boundaries of a reverse 'S' curve or 'dog-leg' morphology indicating that they were following boundaries of former open 'strip' fields.

Re-organised Piecemeal Enclosure (15)

Small irregular or rectilinear fields that have lost 10% or more field boundaries since the OS 1st edition mapping or areas of large irregular or rectilinear fields. At least two field boundaries will have a reverse 'S' curve or 'dog-leg' morphology. These enclosure patterns have developed

through a process of amalgamation of fields created through piecemeal enclosure. This will in most cases have occurred since the OS 1st edition mapping.

Description:

One of the most abundant HLC types in the county. This type represents the older enclosure that dates from the medieval period onwards. There is a distinctive concentration and pattern of distribution of this type in Warwickshire. Most is found concentrated in the north-western part of Stratford and Warwick districts, in North Warwickshire or in Rugby Borough. There is a lack of irregular fields in the south and east of the county, in western Solihull and in a strip running from Warwick to Coventry. Part of this is due to the change of this type to planned enclosure and more modern amalgamated field patterns. In the case of Solihull it is settlement expansion and the more intensive use of the land that has led to a severe decline of irregular fields in this area.

Period:

Medieval - Post-medieval

Trajectory of Change (1880s – 1955):

Declining Critically (-60%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (31%)

Reason for change (1880-2001):

The sharp decline in the early 20th century of irregular enclosure is probably due to the continuing expansion of planned enclosure and the intensification of agriculture in the immediate post-war years leading to an amalgamation of fields and often straightening of boundaries and eradication of smaller irregular fields. In the later 20th century this trend appears to have been reversed with an increase of irregular fields; part of this could be

attributed to the small increase of enclosure, modern irregular field creation and, in the case of more recent agri-environment schemes, a policy of replacing field boundaries from the 19th century.

Factors influencing further change:

Re-organisation of field pattern by amalgamating fields or removing boundaries. In some cases with modern agri-environment schemes the boundaries that were removed may be replaced. Some of these areas are close to settlement and could be at risk from settlement expansion.

Biodiversity Potential:

Medium - These fields and hedgerows by their nature tend to be more established, have a longer history and can be potentially more species rich. The irregularity of the fields often leads to some areas remaining less intensively used by modern agriculture.

Archaeological Potential:

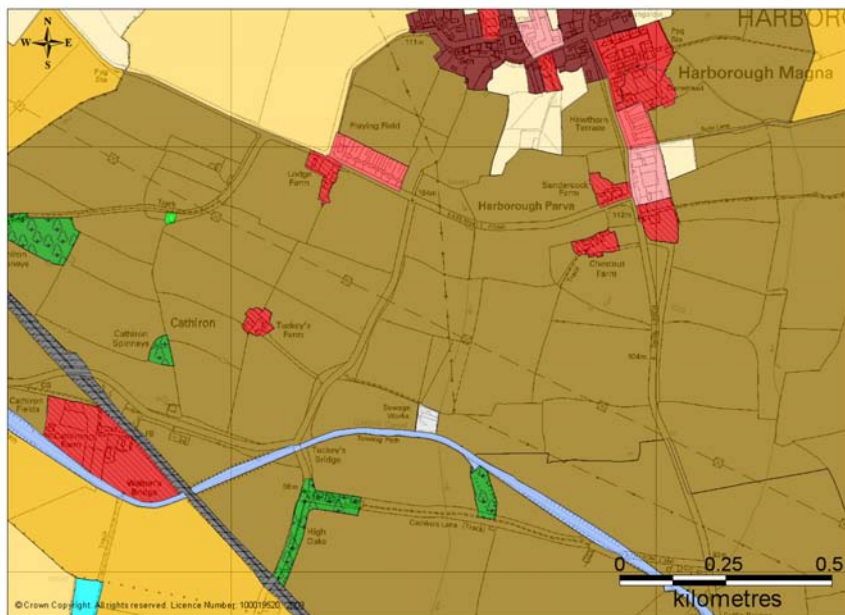
Medium/High - These areas are typically associated with ridge and furrow and deserted medieval settlements. There is a higher potential in permanent pasture, lower under arable cultivation. These areas like all enclosure have a high potential for crop and soil marks, and archaeology from most periods.

Management:

Maintain the field pattern, road pattern and boundaries. Revert to pasture if possible.

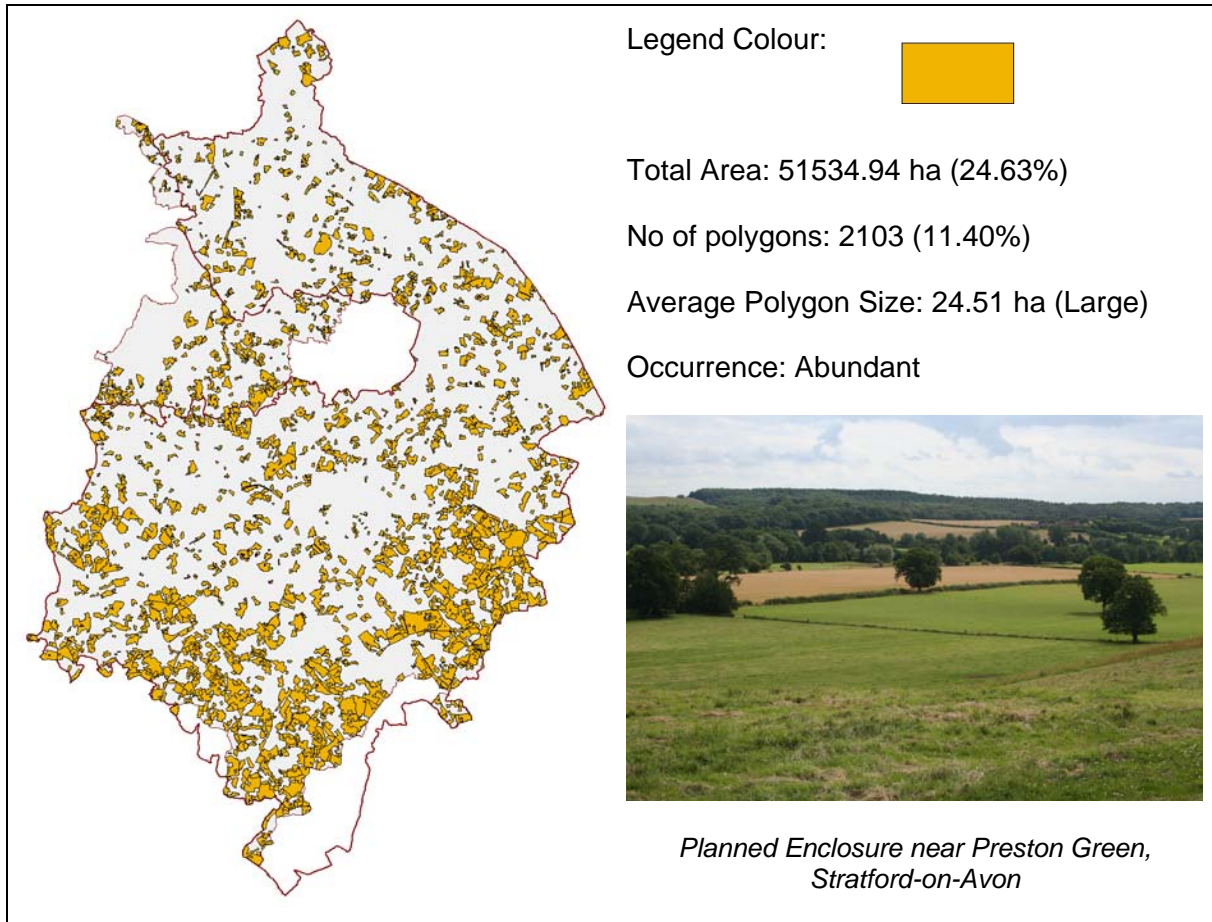
Research:

The origin of this type is not fully understood. Further work is needed to clarify dates of boundaries and field patterns.



Piecemeal Enclosure at Harborough Magna and Harborough Parva, Rugby

Planned Enclosure (16, 17, 18)



Definition:

Small or large, generally rectilinear, enclosures with a predominantly straight boundary morphology giving a geometric, planned appearance. These are usually representative of planned or parliamentary enclosure from the 18th and 19th centuries.

Sub-types:

Planned Enclosure (16)

Small or large enclosures with a predominantly straight boundary morphology giving a geometric, planned appearance. Laid out by surveyors these field patterns are the result of later enclosure during the 18th and 19th centuries. This includes commons enclosed by Act of Parliament.

Other Small Rectilinear Fields (17)

Small rectilinear fields which cannot be assigned to one of the other historic landscape character types. Includes small

meadows and closes not occurring next to settlements.

Other Large Rectilinear Fields (18)

Large rectilinear fields which cannot be assigned to one of the other historic landscape character types. Includes enclosure patterns created through the amalgamation of fields since the OS 1st edition mapping.

Description:

This is the most common type in Warwickshire making up almost a quarter of the total area. This type is much more scattered throughout the county than other field types; however, there are two areas of high concentration. One is in the south and east of Warwickshire and the other is in the rural part of Solihull. The areas where this type has declined appear to be mainly areas of 20th century urban expansion such as Solihull, Nuneaton and Bedworth, Rugby, Kenilworth and Leamington. A few large areas have

succumbed to such things as airports and military sites. There are two areas of planned enclosure that appear to have been created after the 1880s but which have subsequently disappeared in the southern part of North Warwickshire and in the northern part of Stratford-on-Avon District.

Period:

18th-19th century

Trajectory of Change (1880s – 1955):

Declining Critically (-62%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (58%)

Reason for change (1880-2001):

This declines in the first half of the 20th century due to a combination of settlement expansion and the amalgamation of fields to form very large fields just after the Second World War. In the later part of the 20th century more planned fields appear to have been created. Some of these may be re-organised irregular fields, whilst some may be reversion of land to agriculture predominantly from the decline of the extraction industries.

Factors influencing further change:

The amalgamation of fields to form very large post war type fields. Some settlement expansion could affect this type.

Biodiversity Potential:

Medium/Low - The potential will vary according to the location and quality of these enclosures and boundaries. This type in general is quite intensively farmed and tends to be a mixture of arable and improved/unimproved grassland and is more recent than piecemeal enclosure.

Archaeological Potential:

Medium - This type often has ridge and furrow and deserted medieval settlements associated with it. There is higher potential in permanent pasture, less under arable cultivation. These areas, like all enclosure, have a high potential for crop and soil marks, and archaeology from most periods.

Management:

Maintain the field pattern, road pattern and boundaries. Revert to pasture if possible.

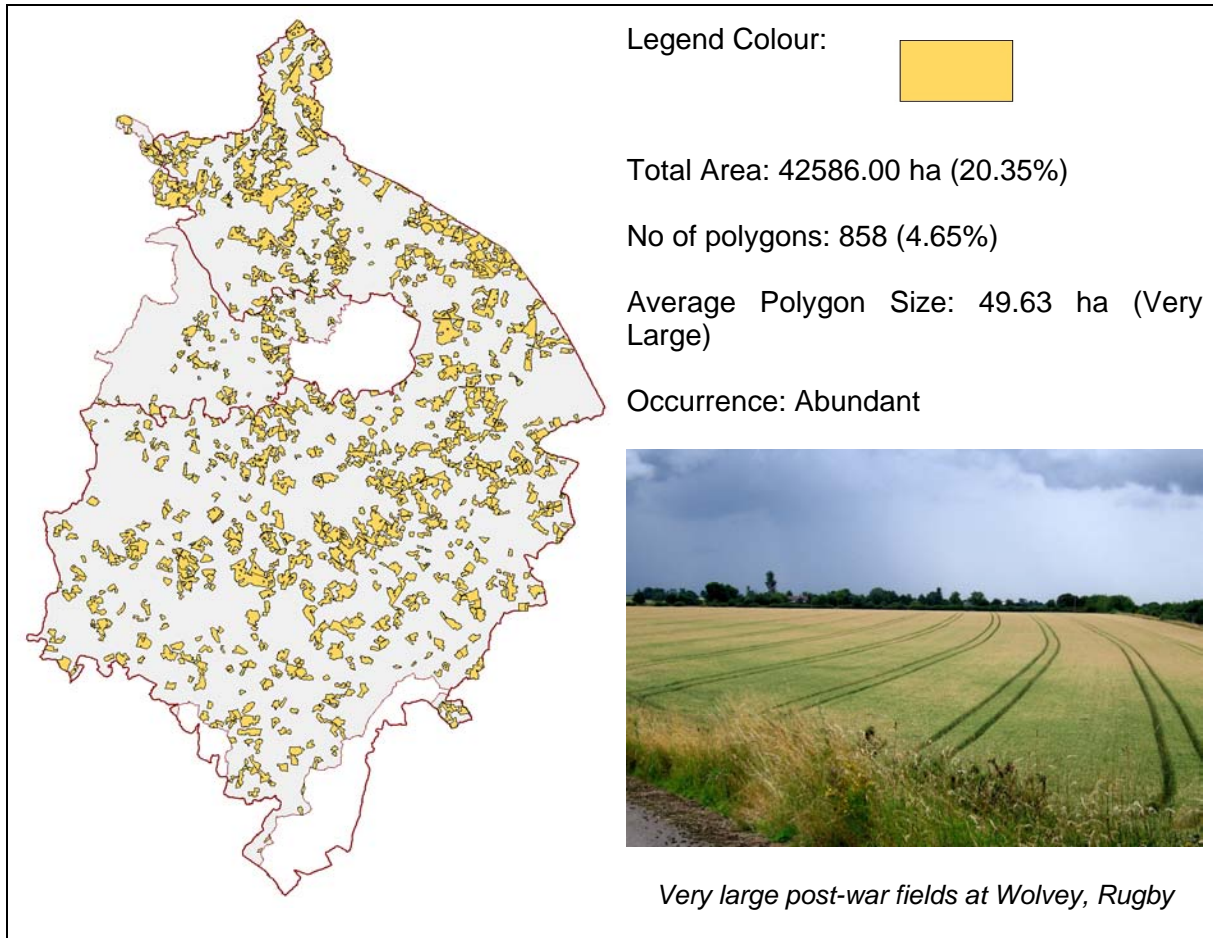
Research:

The exact dates when all these areas were enclosed have not been established, although much of this may well be documented (see Tate, 1943, Martin, 1967 and Hollowell, 2000). With enclosure and tithe maps this may be possible and may narrow a history of enclosure to each series of fields within a parish. Each parish could also be analysed and interpreted to see styles and patterns that emerge.



Planned Enclosure near Knightcote, Stratford-on-Avon

Very Large Post War Fields (19)



Definition:

Very large fields (over 8Ha, often much larger) created since the OS 1st edition mapping. These have been formed usually as a result of Post-War agricultural improvements intended to meet the requirements of intensive arable cultivation.

Sub-types:

Very Large Post War Fields

Description:

This type together with planned and irregular fields makes up over two thirds of Warwickshire. This type is scattered widely throughout the county with some concentrated areas in North Warwickshire, northern Rugby Borough and in a large band running from north of Stratford town to south of Warwick and Leamington and leading to Rugby. It is unclear why these concentrations exist in this pattern although in general this type appears to be

replacing the older smaller irregular fields and not the later larger planned fields.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (97.11%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

This type has increased in the early 20th century, mainly just after the Second World War due to the intensification of agriculture and the amalgamation of earlier enclosures. The later part of the 20th century has seen this process stabilise.

Factors influencing further change:

This type could change due to the re-introduction of field boundaries as part of current agri-environment schemes, recreating older field patterns and landscapes.

Biodiversity Potential:

Low-medium - These fields are the most intensively managed with the least amount of hedgerows and are generally species poor.

Archaeological Potential:

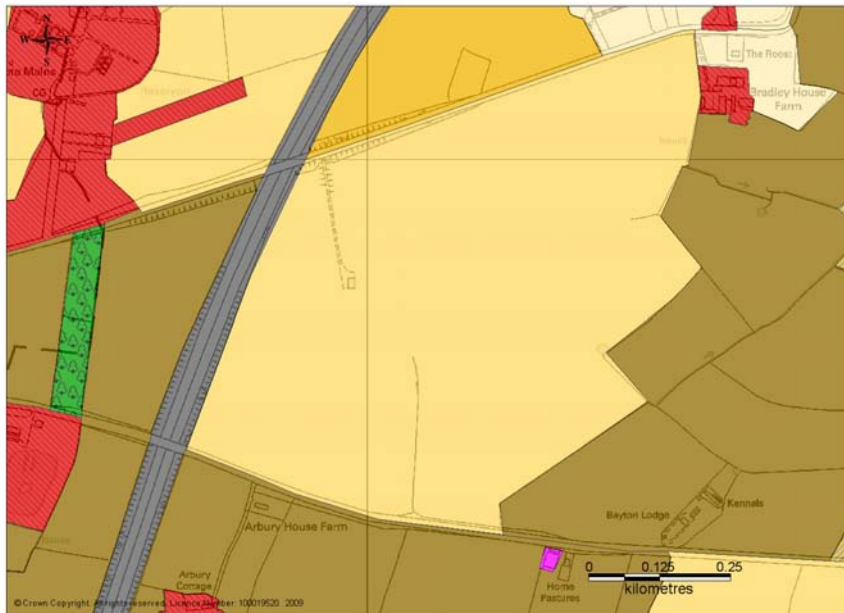
Low-Medium - These areas tend to be under intensive arable cultivation and will have the least survival of archaeological deposits. Some deeply buried features may survive and sometimes these areas produce crop and soil marks.

Management:

Revert to pasture or reduce plough depth where possible.

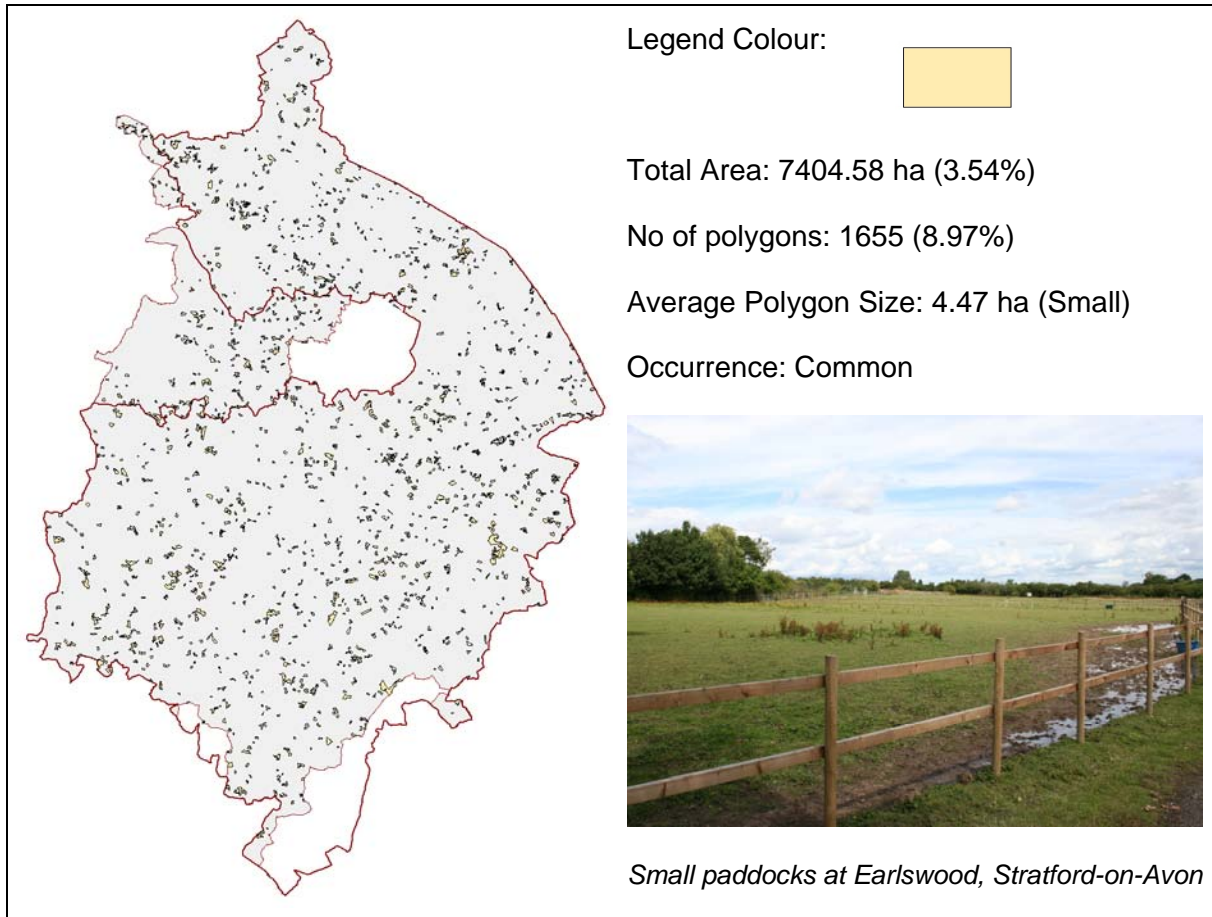
Research:

A modern type with few research opportunities.



Very large post-war fields at Wolvey, Rugby

Paddocks and Closes (5)



Definition:

Small and generally irregular fields located on the edge of settlements usually representing small meadows and paddocks.

Sub-types:

Paddocks and Closes

Description:

This type is widely scattered throughout Warwickshire with no concentration in any particular place. The distribution appears to relate to the edge of smaller villages and settlements or may be associated with farmsteads. In general they have a very good survival rate remaining fairly consistent throughout the 20th century, with a few being lost to the infill of settlement mainly around Rugby, Warwick, Kenilworth and Atherstone. In the Solihull Metropolitan area a different pattern emerges where a large number of this type present in the 1880s has now gone

and there appears to be a pattern of post 1880's creation and disappearance by 2001; the reason for this unique pattern is not yet clear.

Period:

Medieval - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Moderately (21.87%)

Trajectory of Change (1955 – 2001):

Declining Slowly (-13%)

Reason for change (1880-2001):

Early 20th century increase due to the increase of farmsteads and the enclosure of areas close to settlements. Later 20th century decline probably due to settlement expansion and infill into these areas and the decline of farmsteads

Factors influencing further change:

Settlement expansion and further decline of farmsteads.

Biodiversity Potential:

Medium- These small fields generally have well established hedgerows and are often under pasture, producing more species rich areas.

Archaeological Potential:

Medium-High - These areas are often close to medieval settlement and can contain deserted or shrunken medieval settlement remains as well as ridge and

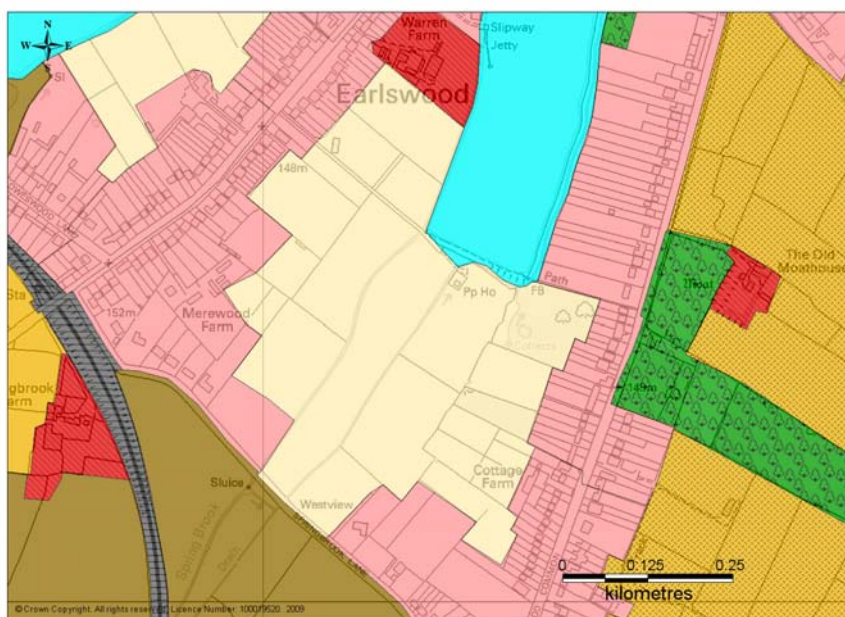
furrow. Higher potential in permanent pasture, less under arable cultivation. These areas like all enclosure have a high potential for crop and soil marks, and archaeology from most periods.

Management:

Retain the field pattern and boundaries.

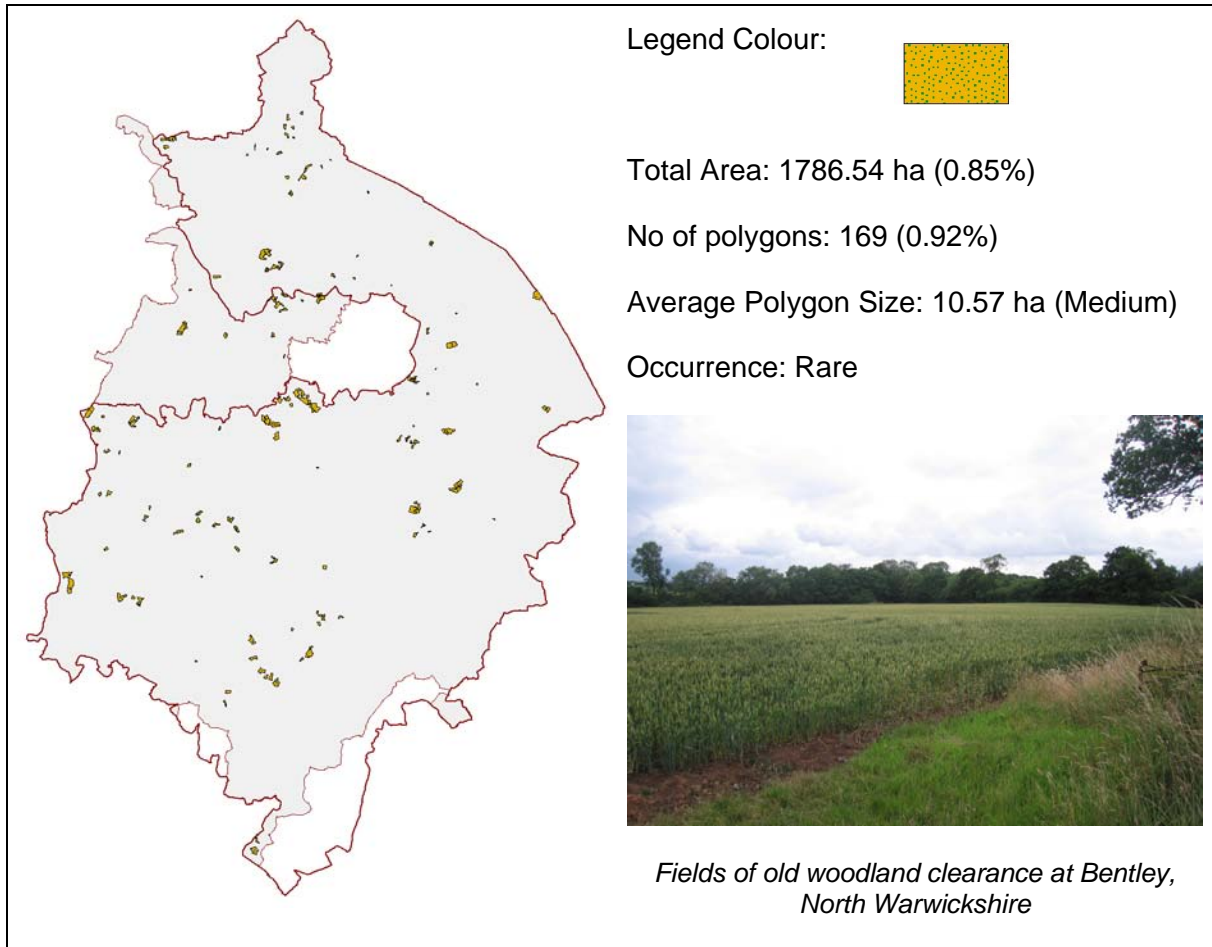
Research:

The more modern paddocks have few research issues but older paddocks and closes are linked to historic settlements and this relationship could be explored.



Small paddocks at Earlswood, Stratford-on-Avon

Woodland Clearance (6, 7, 8)



Definition:

Fields which appear to have been created through the clearance of woodland. These are usually located close to areas of ancient woodland. Generally small and irregular with sinuous or curvilinear boundaries representing the old woodland boundary.

Sub-types:

Small Assarts (6)

Small irregular or rectilinear fields which appear to have been created through woodland clearance. These are usually located close to areas of ancient woodland.

Large Assarts with Sinuous Boundaries (7)

Large irregular or rectilinear fields which appear to have been created through the clearance of woodland. These are usually located close to areas of ancient woodland. This type includes fields that

have been created through the post 1880s amalgamation of small assarts.

Planned Woodland Clearance (8)

Small and large rectilinear or irregular fields typically with straight boundaries that appear to have been created through woodland clearance. These are usually located close to areas of ancient woodland.

Description:

The little of this type that is found in Warwickshire is found, not surprisingly, associated with woodland, the majority with ancient woodland. Most woodland clearance in Warwickshire appears to have taken place before 1880 and virtually none has taken place since 1955. Many of the fields cleared for woodland later develop into other types. It is difficult to ascertain if these areas are in fact medieval assarts, on one hand it may be possible given their close association with

ancient woodland, on the other hand the enclosure pattern has changed vastly in Warwickshire since the medieval period and many of these may be later re-organised fields. If large parts of the county were assarted in the medieval period then the evidence for this in the present landscape or even on maps in the last 100 years has gone.

Period:

Medieval - late 20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-35%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

Most woodland clearance appears to have taken place pre 1880s.

Factors influencing further change:

Re-organisation of the field pattern of this type to be more productive such as by straightening hedgerows or amalgamating to make larger fields. Reversion of these areas back to woodland due to their proximity to established woods and modern woodland planting schemes

Biodiversity Potential:

High - The hedgerows of these areas are very likely to be remnants of woodland and to be species rich.

Archaeological Potential:

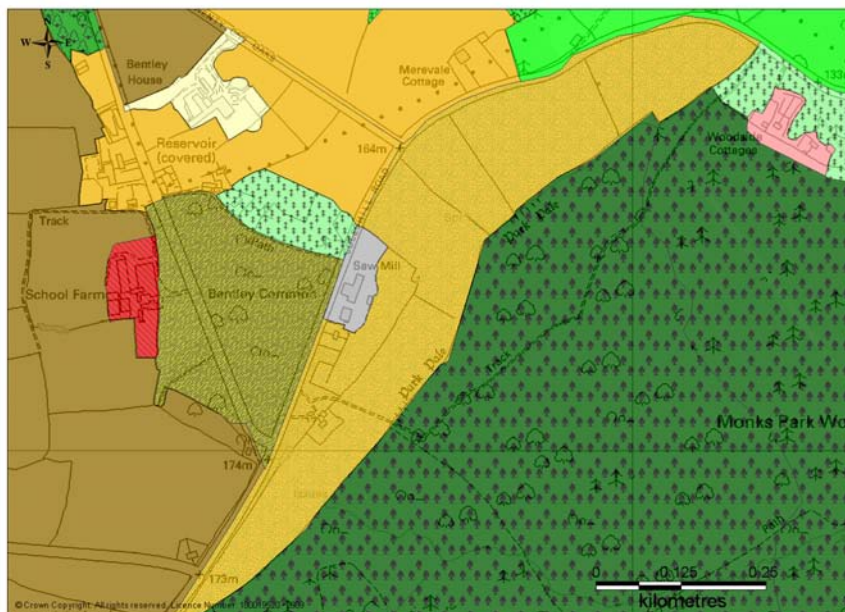
Medium - These areas may contain remnants of archaeology associated with woodland or settlements associated with assarting including moated settlement sites. Higher potential in permanent pasture, less under arable cultivation. Some prehistoric remains, designed landscapes and woodland industrial sites are associated with these areas however in general there is a distinct lack of archaeological sites found in these areas.

Management:

Retain the field pattern and boundaries. Good examples of this type should be retained especially those near ancient woodland and those which may have a medieval origin.

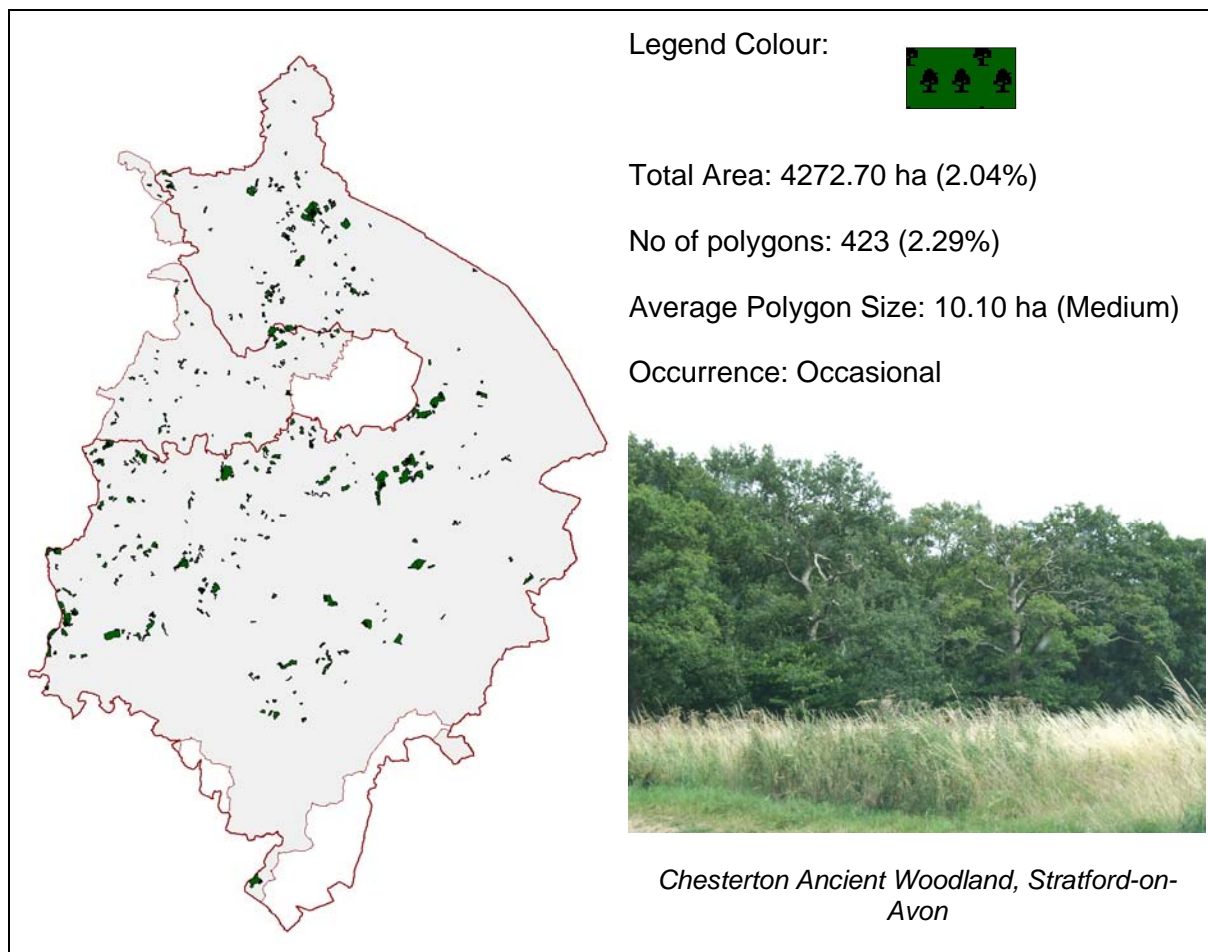
Research:

The earlier woodland clearance in Warwickshire in the medieval period is not fully understood. The assarting process and its connection with medieval settlement patterns and woodland management needs to be better explored and understood.



Woodland clearance at Bentley, North Warwickshire

Ancient Woodland (21, 22, 23,)



Definition:

Woodland designated by English Nature as 'Ancient Semi-Natural' and 'Ancient Replanted'. This will include some of the oldest woodland in the county, probably dating back to at least the medieval period. However some parts may have been planted with coniferous species or even been cleared and replanted during the 19th or 20th century.

Sub-types:

Broad-leaved Ancient Woodland (21)

Woodland designated by English Nature as 'Ancient Semi-Natural' (land that has had continuous woodland cover since at least 1600 AD and may have been managed by coppicing or felling and allowed to regenerate naturally) and identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being broad-leaved or broad-leaved semi-natural. This will include

some of the oldest woodland in the county, probably dating back to at least the medieval period.

Mixed Ancient Woodland (22)

Woodland designated by English Nature as 'Ancient Semi-Natural' (land that has had continuous woodland cover since at least 1600 AD and may have been managed by coppicing or felling and allowed to regenerate naturally) and identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being mixed or mixed semi-natural. This will include some of the oldest woodland in the county, probably dating back to at least the medieval period; however some parts may have been planted with coniferous species.

Replanted Ancient Woodland (23)

Woodland designated by English Nature as 'Ancient Replanted' (land that has had continuous woodland cover since at least 1600AD where the original native tree

cover has been felled and replaced by planting, usually conifers) and identified by the Forestry Commission or the Warwickshire Habitat Biodiversity Audit as being replanted or containing conifers or young trees. These areas were probably cleared and replanted during the 19th or 20th century.

Description:

Ancient woodland is scattered throughout Warwickshire with a bias in the north and west of the county, not surprisingly in the area associated with the Arden. This type tends to form in medium sized pockets of woodland with small patches in between. There has been a substantial decline since the 1880s of ancient woodland. Mostly this takes place with the shrinking of the actual wood rather than the total eradication of the woodland. After 1955 this decline has slowed and stabilised.

Period:

Medieval - Post-medieval

Trajectory of Change (1880s – 1955):

Declining Critically (-92%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (314%)

Reason for change (1880-2001):

The decline of ancient woodland is associated with the general decline of woodland in the early 20th century although it appears to have been at a rapid rate. The rapid expansion in the second half of the 20th century is probably related to the identification of ancient woodland as a type and the replanting of ancient woodland.

Factors influencing further change:

Woodland management policies will probably allow this type to expand although at a small rate. It is unlikely to reduce although there could be threats from some settlement expansion.

Biodiversity Potential:

High - Ancient Woodland by its nature supports a variety of plant and animal species, often of national importance. The actual potential will be determined from past and present management.

Archaeological Potential:

High - The potential for well preserved remains associated with ancient woodland is high including: historic woodland management and industries, moated settlements, designed landscapes, some medieval settlement and deserted settlement, and the potential for reasonably preserved roman and prehistoric remains.

Management:

Retain historic woodland features where possible and carry out archaeological surveys to understand the archaeological resource when any drastic change or management is proposed.

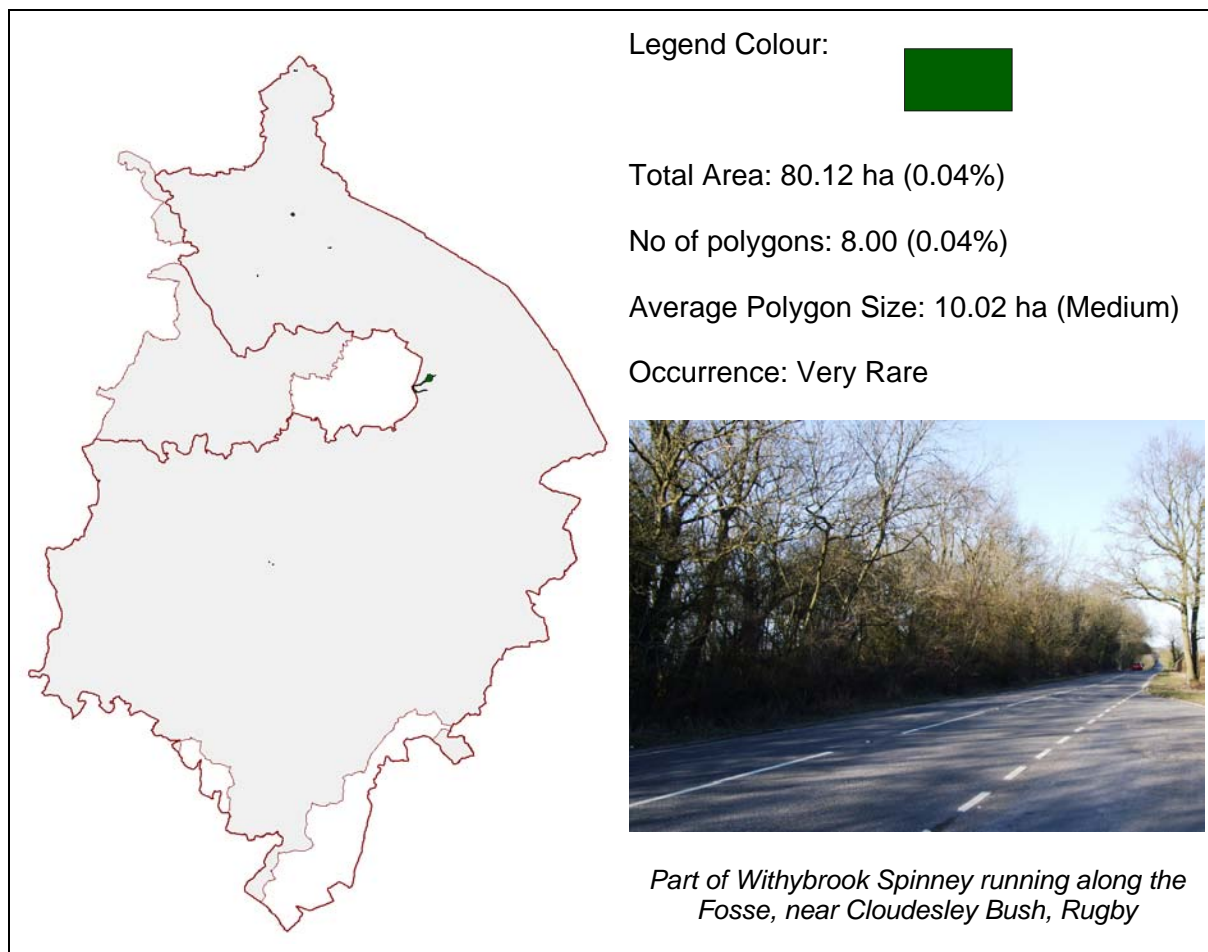
Research:

Despite some research already into the medieval woodland of Warwickshire (Wager, 1998) there are still many unanswered questions. We still do not fully understand the origins, changes or historic uses of these woodlands. Of particular interest is the industrial use of woodlands.



Chesterton Ancient Woodland, Stratford-on-Avon

Woods with Sinuous Boundaries (24, 25, 26)



Definition:

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit and which have predominantly sinuous boundaries. Whilst not designated as 'Ancient' woodland these areas may potentially contain fragments of older woodland.

Sub-types:

Broad-leaved Woods with Sinuous Boundaries (24)

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being broad-leaved and which have predominantly sinuous boundaries. Whilst not designated as 'Ancient' woodland these areas may potentially contain fragments of older managed woodland.

Mixed Woods with Sinuous Boundaries (25)

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being mixed and which have predominantly sinuous boundaries. These areas may represent stands of older woodland colonised by or partially planted with conifers.

Coniferous Woods with Sinuous Boundaries (26)

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being coniferous and which have predominantly sinuous boundaries. In most cases these are likely to represent plantations.

Description:

This type is very rare in Warwickshire; some of this rarity may be because it has not been easily identified in the landscape and that often woodland matches other HLC Types better. The little that does exist is found in very small patches in North

Warwickshire and Warwick District. A larger area is associated with Coombe Abbey and this type should perhaps be part of the park and garden area rather than separated as woodland. The final area of woodland identified is Withybrook Spinney. This curious thin strip of woodland partly follows the Fosse Way Roman road and then heads west running in a sinuous form following, or alternately followed by a parish boundary. With the exception of the woodland at Coombe Abbey these area of woodland may well be remnants of ancient woodland.

Period:

Post-medieval (possibly medieval)

Trajectory of Change (1880s – 1955):

Declining Slowly (-7%)

Trajectory of Change (1955 – 2001):

Declining Slowly (-13%)

Reason for change (1880-2001):

This type is relatively stable and the slow decline may be associated with the general loss of woodland from the early 20th century.

Factors influencing further change:

Changes in agricultural and woodland policies.

Biodiversity Potential:

Medium. This depends usually on the tree species planted. There is a higher potential where there is more variety of tree species.

Archaeological Potential:

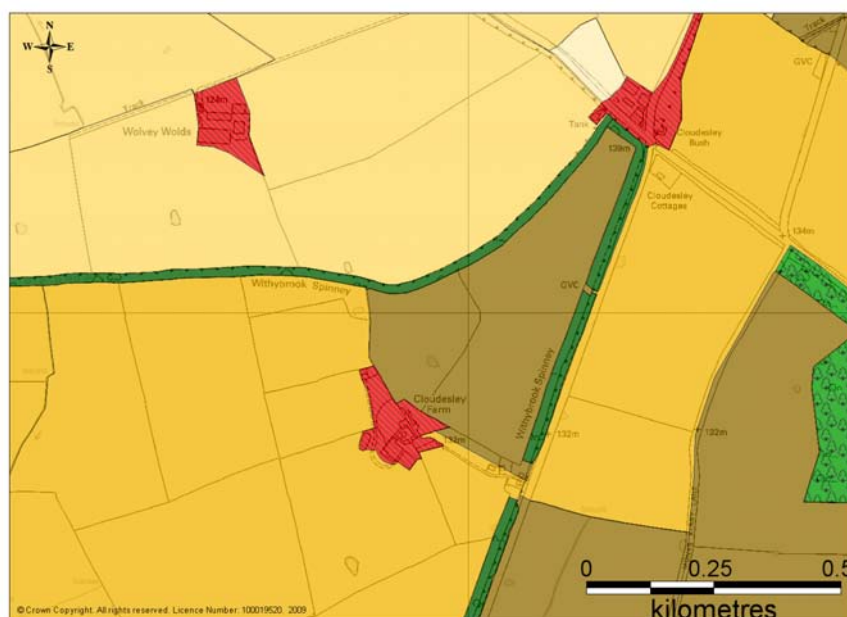
Medium - The lack of these areas make it difficult to determine the archaeological potential. They may be remnants of older woodland which may have archaeological remains associated with this type such as historic boundaries, historic woodland management and industries, moated settlements, designed landscapes, some medieval settlement and deserted settlement, and the potential for reasonably preserved roman and prehistoric remains.

Management:

This will vary according to the specifics of each wood but in general retention and management of historic woodland features where possible, and archaeological survey to understand the archaeological resource when any drastic changes or management is proposed.

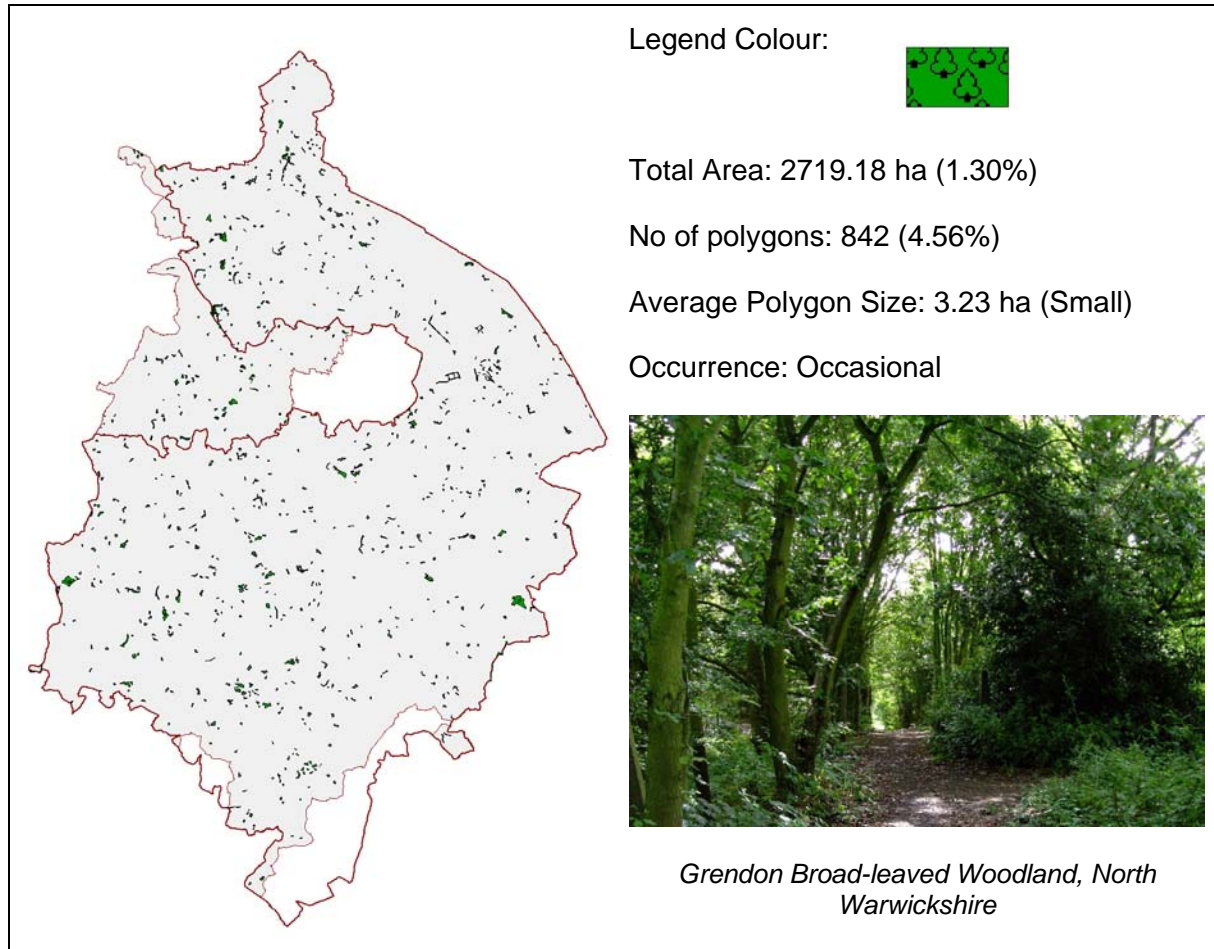
Research:

Some of these woods themselves may be of interest and some may have potential origins as ancient woodland.



Withybrook Spinney running along the Fosse, near Cloudesley Bush, Rugby

Broad-leaved Plantation (27)



Definition:

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being broad-leaved plantations. Straight boundary morphology or the wood's name may suggest instances where the plantation originates in the 19th or 20th century.

Sub-types:

Broad-leaved Plantation

Description:

This type makes up the second most common woodland type in Warwickshire. The pattern of woodland forms a large number of very small areas scattered widely throughout the county. The majority of this woodland is found associated with hilly areas or watercourses; occasionally they are located on parish boundaries. In North Warwickshire this type of woodland is associated with mineral extraction sites.

There was a rapid decline of this type in the early 20th century associated with a general trend of deforestation. However it may have been that these larger areas of broad-leaved woodland once formed ancient woodland, but more research would be needed to confirm this. The areas where this broad-leaved woodland once formed tend to be near areas of ancient woodland.

Period:

Post-medieval - late 20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-31%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

Broad leaved woodland saw a rapid decline in the first half of the 20th century due to deforestation, settlement expansion

and an increase in the conversion of areas to farming. The later half of the 20th century has seen this stabilise.

Factors influencing further change:

Woodland management policies will probably allow this type to expand although at a small rate. It is unlikely to reduce although it could be threatened from settlement expansion.

Biodiversity Potential:

Medium/High - Broad-leaved woodland has the potential for a good variety of flora and fauna and is often in close proximity to other woodland or ancient woodland. This also aids migration and colonisation of other plants and animals.

Archaeological Potential:

Medium – There are many examples of archaeological sites associated with

broad-leaved woodland including: designed landscapes, medieval deserted settlements, moated settlements, and prehistoric and industrial sites. The exact potential will depend on previous use of the land and although woodland can protect some features it can also damage archaeology to a certain extent.

Management:

This will vary according to the specifics of each wood but in general retention and management of historic woodland features where possible and archaeological survey to understand the archaeological resource when any drastic changes or management is proposed.

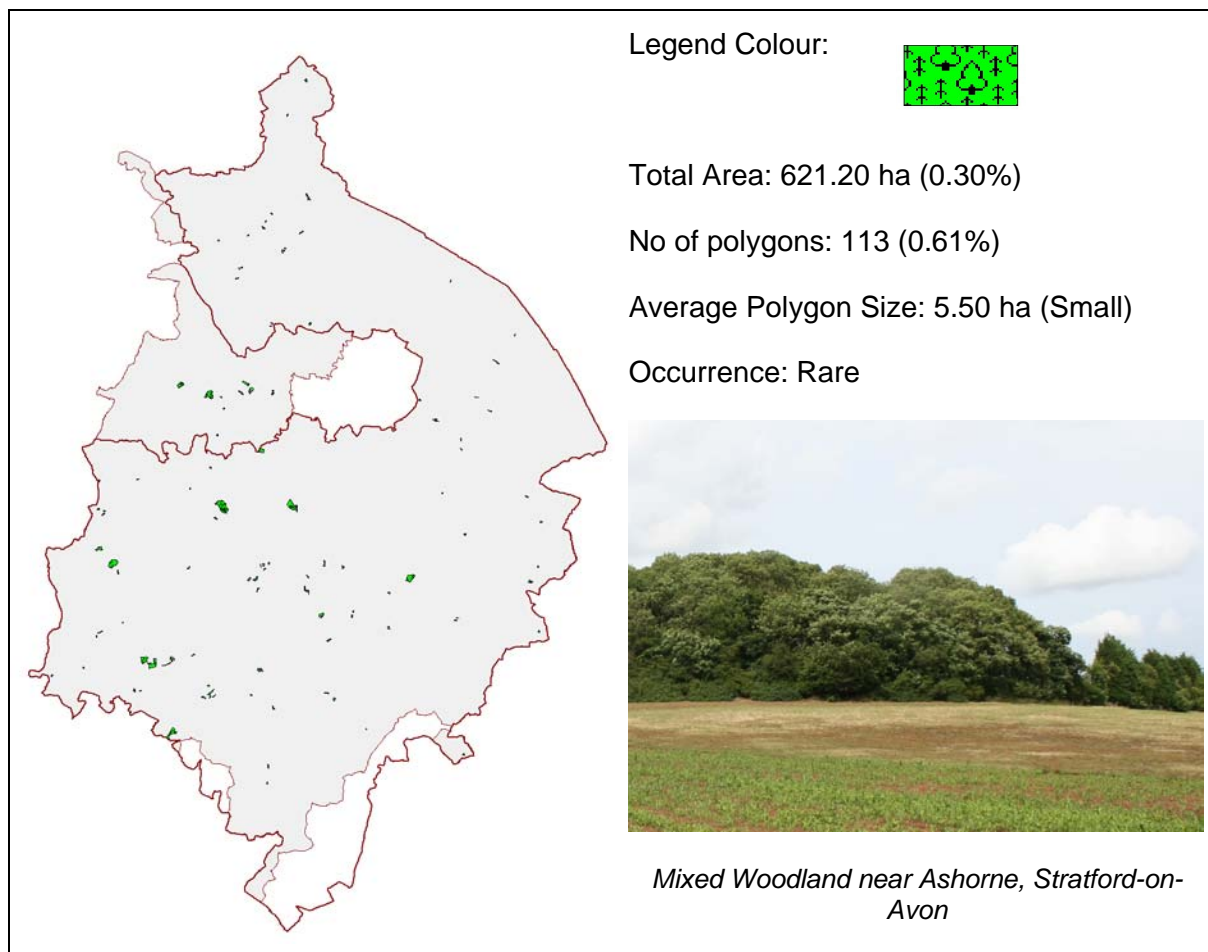
Research:

Some of these woods themselves may be of interest whilst some may have potential origins as ancient woodland.



Broad-leaved woodland near Broadwell, Stratford-on-Avon

Mixed Plantation (28, 30)



Definition:

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being mixed plantation. Straight boundary morphology or the wood's name may suggest where the plantation originates from the 19th or 20th century.

Sub-types:

Mixed Plantation (28)

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being mixed plantation. Straight boundary morphology or the wood's name may suggest the plantation originates from the 19th or 20th century.

Other Plantation (30)

Woodland plantation with no designation and not identified as one of the previous types by the Forestry Commission or the

Warwickshire Habitat Biodiversity Audit. Straight boundary morphology or the wood's name may suggest the plantation originates from the 19th or 20th century.

Description:

This type is sparsely scattered throughout Warwickshire with a concentration in the south and western part of the county. This woodland is generally from later planting and has been slowly increasing in the 20th century.

Period:

19th century - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (57%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (41%)

Reason for change (1880-2001):

This has seen a steady increase over the 20th century and continues to increase.

Factors influencing further change:

Changes in agricultural and woodland policies. Climate change.

Biodiversity Potential:

Medium. This depends usually on the tree species planted and has a higher potential with more variety of tree species.

Archaeological Potential:

Medium/Low - Few archaeological features are associated with this type, but their more modern nature means that some archaeological features that would have been expected to be found in the agricultural landscape can be found here. In Warwickshire mixed woodland is closely

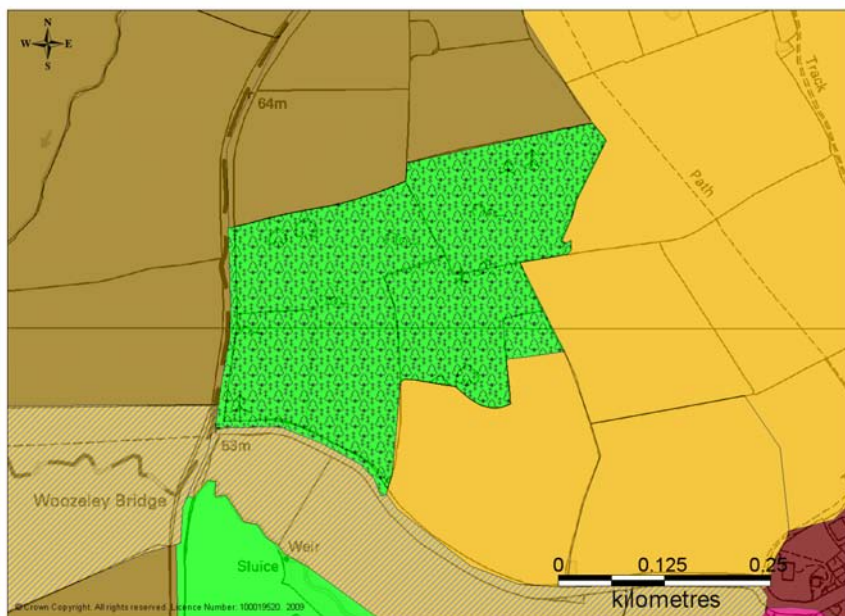
associated with designed landscapes and some deserted medieval settlements.

Management:

The management will usually be through woodland management policy. Any areas associated with designed landscapes should be appropriately managed. Any archaeological features should be retained and managed to prevent any damage.

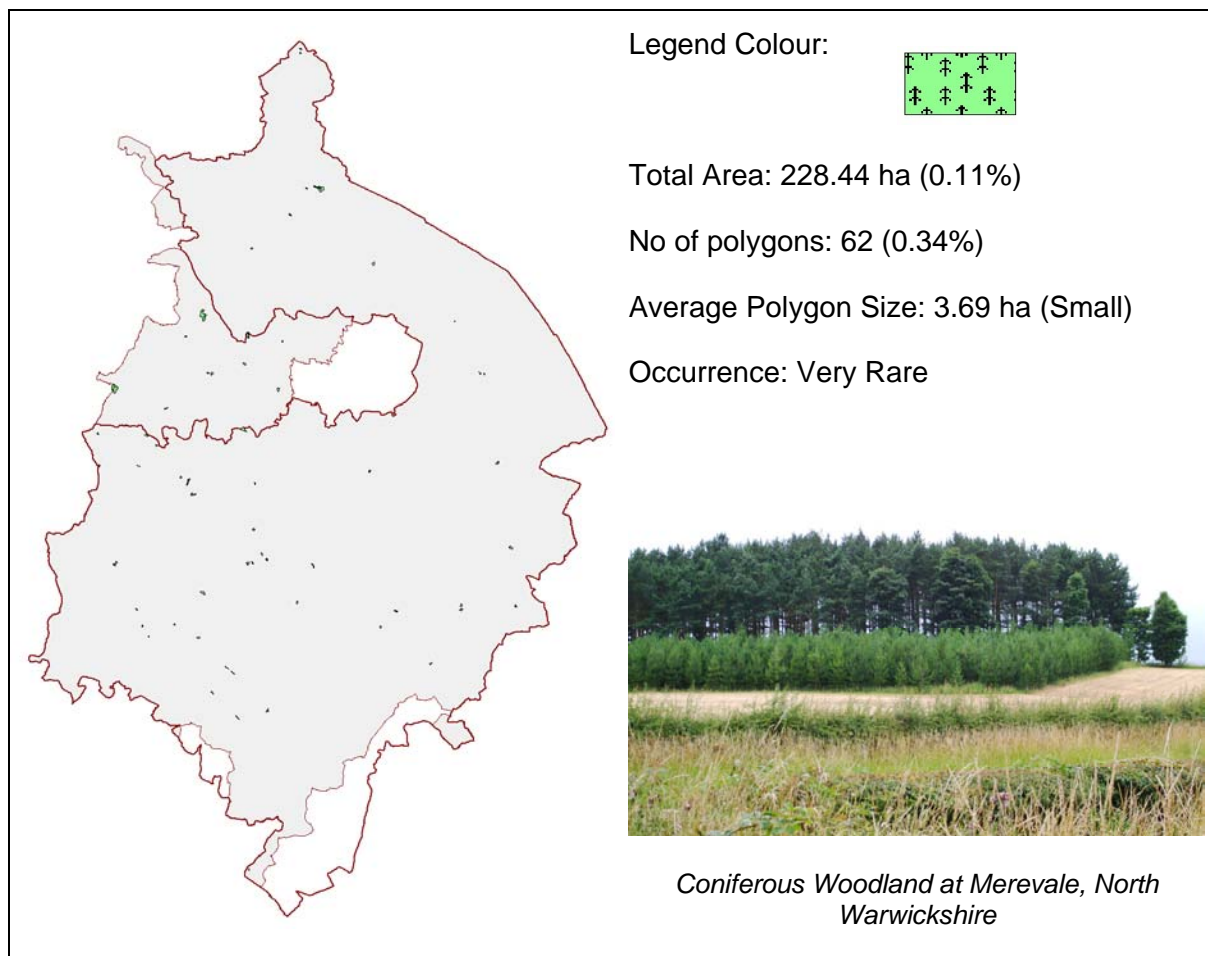
Research:

This type of woodland often forms coverts and spinneys and more research into the creation of these for hunting and sport could be carried out including their origin and extent in the county and whether other features are associated with them. Some very limited analysis is covered in a thematic study found in the Countywide Analysis (Chapter 5).



Mixed Woodland near Ashorne, Stratford-on-Avon

Coniferous Plantation (29)



Definition:

Woodland identified by the Forestry Commission and the Warwickshire Habitat Biodiversity Audit as being coniferous plantation. Straight boundary morphology or the wood's name may suggest where the plantation originates from the 19th or 20th century.

Sub-types:

Coniferous Plantation

Description:

This type is very rare in Warwickshire and sparsely scattered throughout the county in small patches. A greater amount of this type is found in the north and west of the county, like all woodland. It is often associated with designed landscapes. However there are a number of plantations created after 1955, most of which are small areas at the edge of fields probably associated with agricultural stewardship or

woodland grant schemes. This type has been steadily increasing throughout the 20th century.

Period:

19th century - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Moderately (49%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (29%)

Reason for change (1880-2001):

This has seen a steady increase over the 20th century and continues to increase.

Factors influencing further change:

Changes in agricultural and woodland policies.

Biodiversity Potential:

Low-Medium. This depends usually on the tree species planted but rarely do coniferous woods offer the same level of biodiversity as broad-leaved or ancient woodlands.

Archaeological Potential:

Low - Few archaeological features are associated with this type.

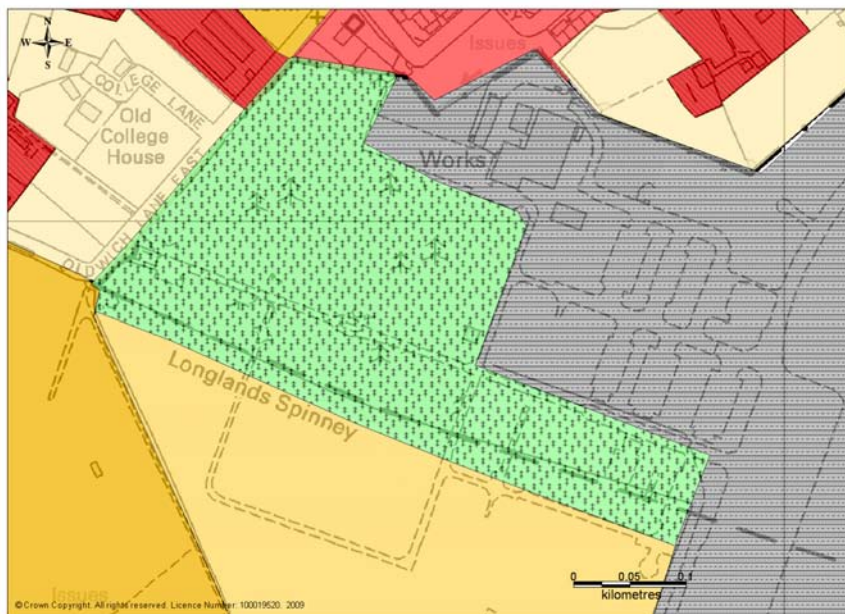
Management:

The management will usually be through woodland management policy. Some of

these woods may have an historic interest and should be retained such as coverts and spinneys especially with the decline of the use of these for sport and hunting.

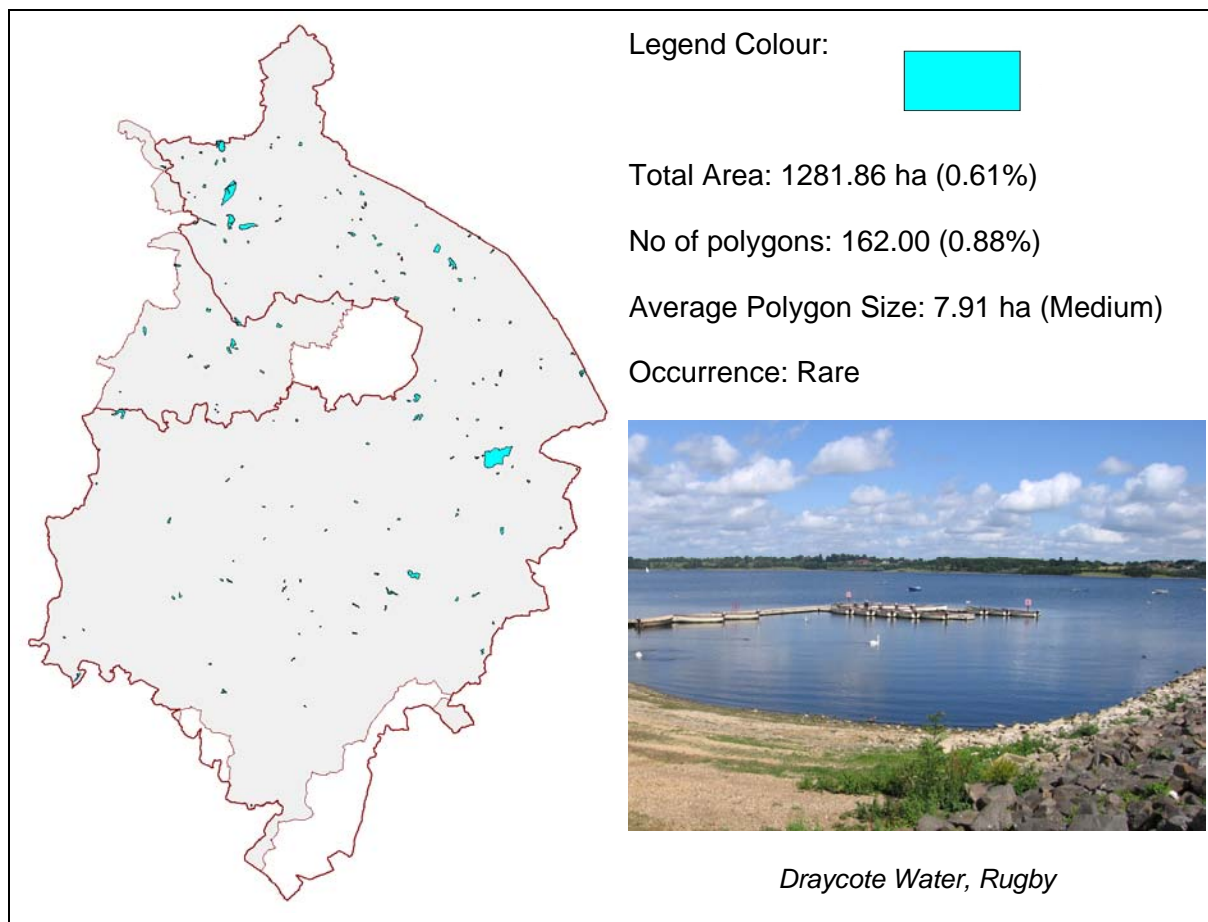
Research:

This type of woodland often forms coverts and spinneys and more research into the creation of these for hunting and sport could be carried out including their origin and extent in the county and if other features are associated with these. Some very limited analysis is covered in a thematic study found in the Countywide Analysis (Chapter 5).



Coniferous Woodland near Honily, Warwick

Artificial body of water (109, 32, 119)



Definition:

Artificial bodies of water including reservoirs, ornamental lakes, fishponds and flooded quarries.

Sub-types:

Artificial Pond/Lake (109)

Generally smaller bodies of water that can be recognised as artificial through the presence of retaining earthworks and/or dams but which are not recognised as reservoirs. These will include ornamental lakes, fishponds, flooded quarries and ponds associated with industrial activity. Also includes artificial water courses or conduits.

Reservoir (32)

Bodies of water that can be recognised as being artificially created generally for the purposes of water supply. These will usually date to the 20th century.

Fishing (119)

Areas identified with a number of artificial ponds and water features for the primary purpose of leisure fishing.

Description:

These are scattered throughout Warwickshire and fall into a number of distinct patterns. Larger areas are usually reservoirs; both those that pre-date the 1880s and which were often canal feeders, and more modern ones such as Draycote Water which is the largest artificial water feature in the county. Medium sized bodies tend to be a result of quarry workings, usually sand and gravel; sometimes these bodies of water are later developed for other uses such as Kingsbury Water Park and parts of Bandon Marsh Nature Reserve. Other medium sized bodies form more modern fishing lakes. Finally there are the more numerous and wider scattered small ponds and lakes sometimes associated with small isolated settlements or country

houses; some of these ponds may date back to the medieval period.

Period:

Mostly 19th - late 20th century although some fish-ponds may be medieval in origin

Trajectory of Change (1880s – 1955):

Increasing Rapidly (67%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (94%)

Reason for change (1880-2001):

Reservoirs were created at the end of the 19th century for the purposes of increasing water supply for a growing population, and to feed canals. This continued into the 20th century but after World War Two this expanded rapidly with the creation of very large reservoirs to supply an expanding population and the increased interest in water sports and fishing.

Factors influencing further change:

The demand for water will increase as populations increase and this may require larger or new reservoirs. The popularity of water sports and fishing may increase or decrease. Once established these rarely change to another type.

Biodiversity Potential:

High - Good potential for a variety of water life and aquatic birds as well as marginal plants on the edge of ponds, lakes and reservoirs.

Archaeological Potential:

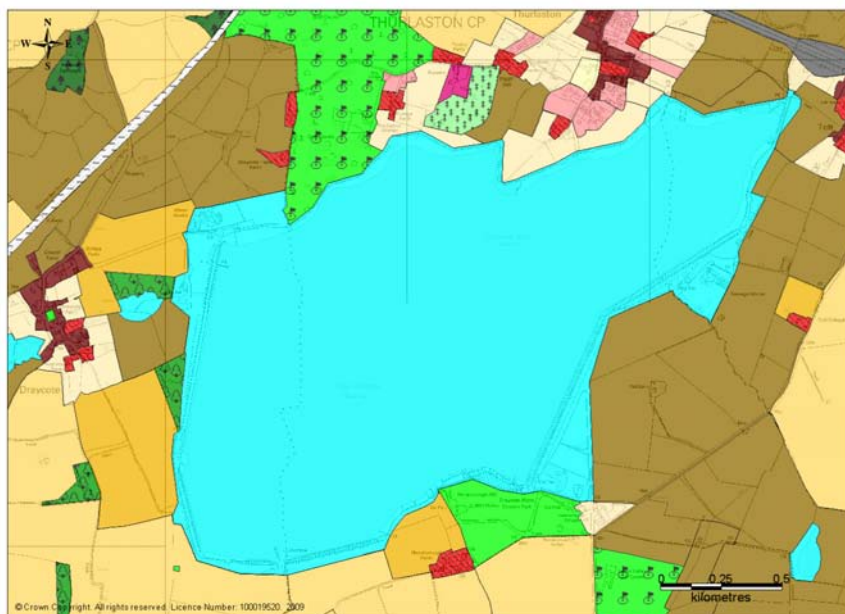
Low-Medium - Although the actual water sites themselves will have limited archaeological potential there is potential on the edge of these sites for industrial and designed landscape features. Some of the reservoirs are linked to canal development. Medieval fish ponds are one important artificial water type.

Management:

Maintain and preserve historic and archaeological remains especially on the edges of these sites or if the sites are of historic importance themselves (e.g. medieval fish ponds or canal feeder reservoirs)

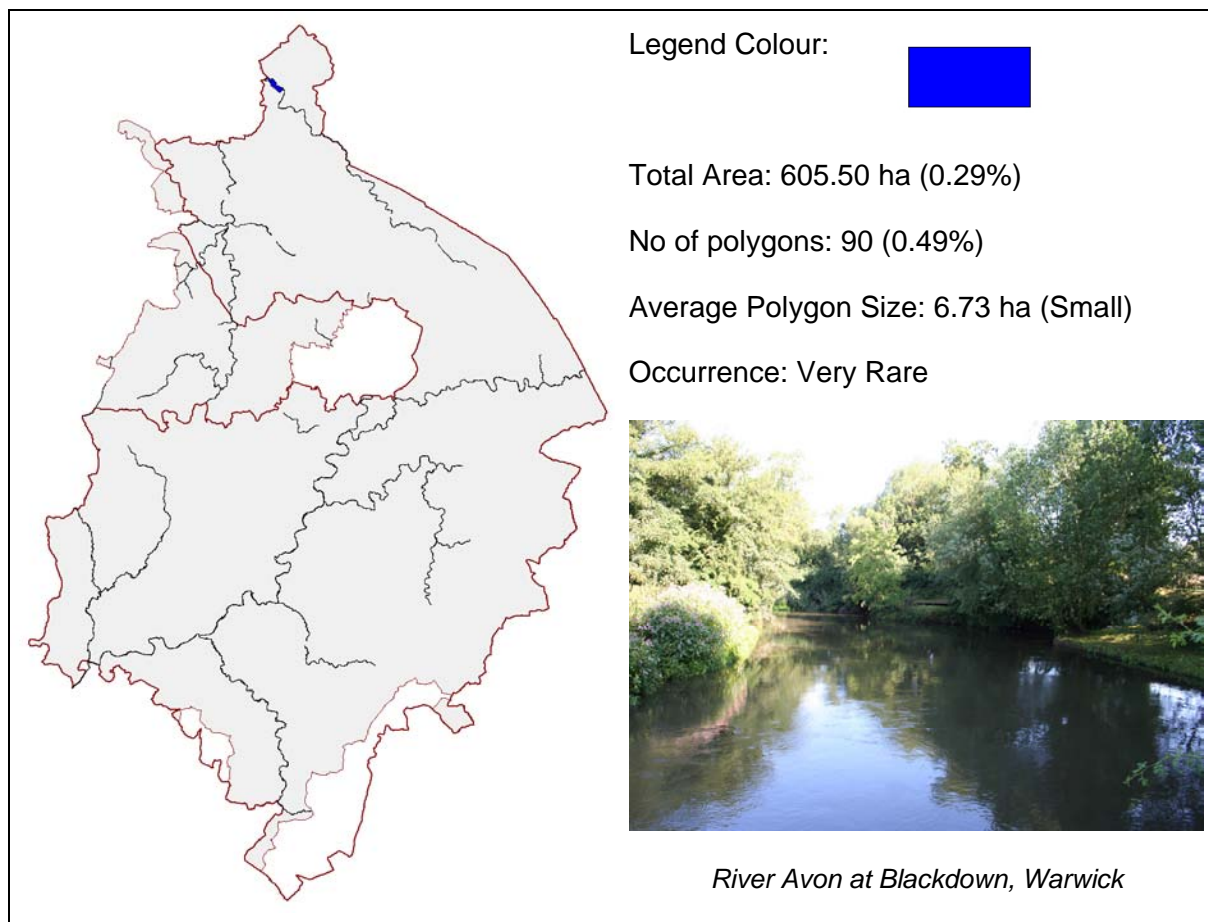
Research:

The true extent of artificial water features from the medieval and post-medieval periods is not fully known.



Draycote Water, Rugby

Natural Open Water (33)



Definition:

Bodies of open water, generally over 1ha, which have natural origins.

Sub-types:

Natural Open Water

Description:

These bodies of water are essentially the river systems of Warwickshire as no other large natural bodies of water occur, the only exception being Alvecote Pools in North Warwickshire which may have formed from collapsed coal mine workings. The river system in Warwickshire is determined by its geography with one water shed dividing the county into two main water catchments. The Avon and its tributaries run from the north east border of Warwickshire south and west while the Tame, Blythe and Cole start in the Solihull/Birmingham area and meet with the Anker and run north. This forms one of the main water sheds for the midlands.

Period:

Pre medieval

Trajectory of Change (1880s – 1955):

Increasing Slowly (8%)

Trajectory of Change (1955 – 2001):

Stable (5%)

Reason for change (1880-2001):

Small increases in the 20th century but generally stable as would be expected.

Factors influencing further change:

Climate change or other major environmental changes affecting the natural water features.

Biodiversity Potential:

High - Rivers and other natural water features accommodate a wide variety of species. Rivers are a UK BAP Priority Habitat.

Archaeological Potential:

Medium - Rivers are associated with a wide range of water management features including mills, bridges and weirs. The potential for waterlogged archaeological remains is high.

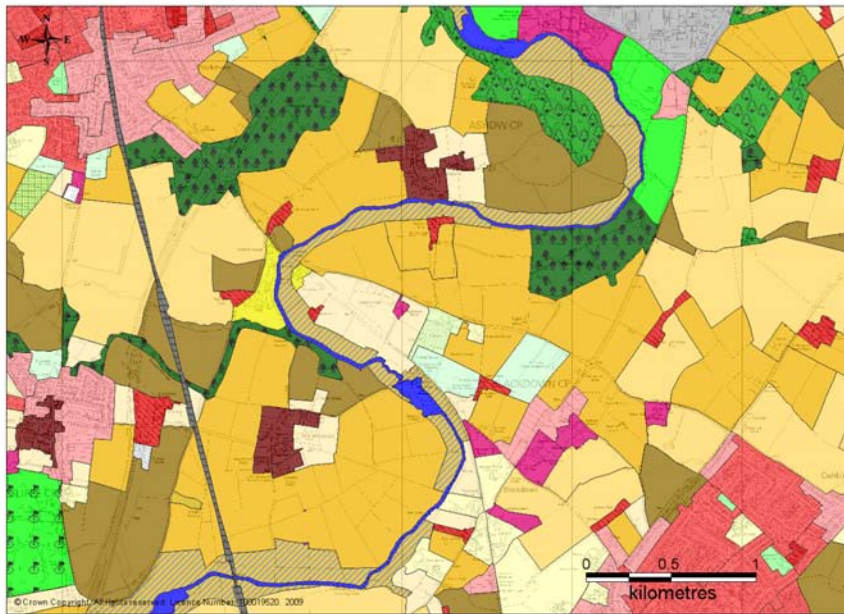
Management:

To maintain and preserve any historic and archaeological features associated with rivers and other natural water features. To

maintain the environmental conditions of these areas where possible to maximise the preservation of waterlogged archaeological remains

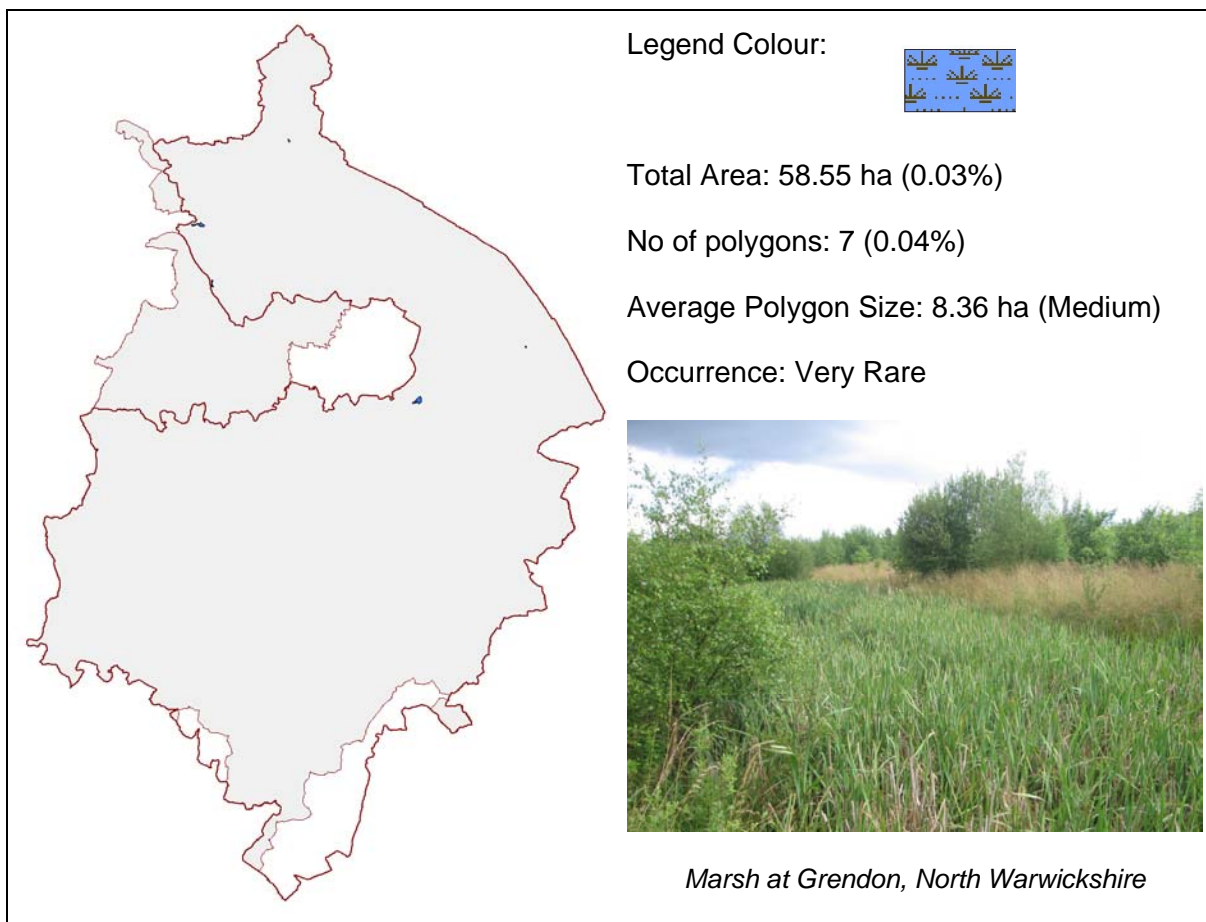
Research:

More work could be carried out regarding archaeological features associated with natural water. The exact extent or condition of waterlogged archaeological deposits in the county is not known.



River Avon at Blackdown, Warwick

Marsh (35)



Definition:

Areas of land that do not fit into any other categories and have been identified as marsh or marshy grassland by the Warwickshire Habitat Biodiversity Audit or marked as marsh on Ordnance Survey mapping.

Sub-types:

Marsh

Description:

This is a very rare type in Warwickshire with only seven areas known. These areas were approximately twice as big in the 1880s but even so this has always been a rare type for Warwickshire with the small amount being determined by its geology and geography along with modern land management. The few examples that exist or once existed are all in the northern half of the county with Brandon Marsh being the biggest and most southerly existing example. Previous marshland has

developed in the last 100 years into other water features and also woodland.

Period:

Pre medieval

Trajectory of Change (1880s – 1955):

Declining Rapidly (-43%)

Trajectory of Change (1955 – 2001):

Stable (-2%)

Reason for change (1880-2001):

The decline at the beginning of the 20th century was probably due to marshland being developed for other land uses such as agricultural land or woodland. In the latter part of the 20th century this decline has slowed and been offset by some large creations of marsh and wetland habitat as a result of minerals extraction.

Factors influencing further change:

Marshland could be developed into other types to maximise use of the land. Further marsh could also be created from the minerals extraction industry.

Biodiversity Potential:

High - Marshes provide a unique and important habitat for a variety of plants and animal species. Brandon Marsh is a good example of a managed marsh with great biodiversity potential.

Archaeological Potential:

Unknown - The limited amount of this type makes it very difficult to determine the

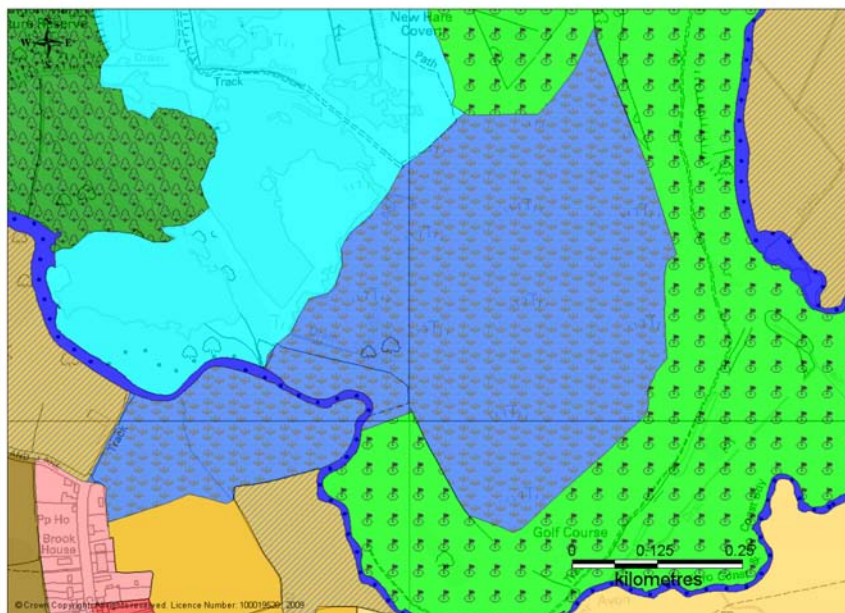
archaeological potential for these areas. However it is expected that these areas could have the potential for waterlogged remains.

Management:

To maintain marshland where at all possible.

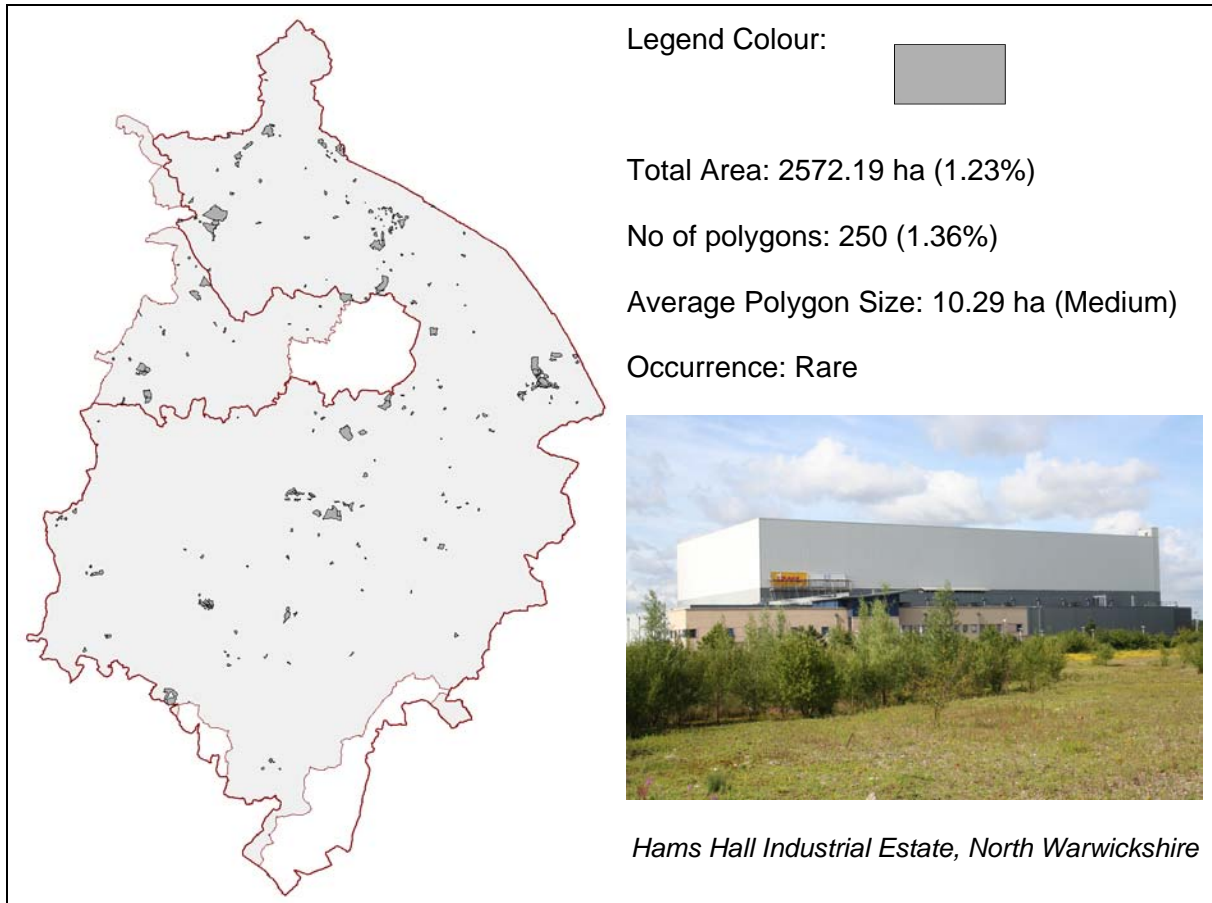
Research:

Previous extent of marshland in Warwickshire are not well understood



Brandon Marsh, Rugby

Industrial complex (37, 38, 39, 41, 44)



Definition:

Areas of industrial activity marked on Ordnance Survey maps and that do not fall into one of the more specific industrial categories. These include modern industrial estates and historic brick works.

Sub-types:

Pre-1880s Industrial Complex (37)

Areas of industrial activity marked on the Ordnance Survey 1st edition mapping (1880's) and that does not fall into one of the more specific industrial categories.

Post-1880s/Pre 1955 Industrial Complex (38)

Areas of industrial activity marked on the Ordnance Survey 1955 edition mapping but not marked on the Ordnance Survey 1st edition mapping (1880's) and that does not fall into one of the more specific industrial categories.

Post 1955 Industrial Complex (39)

Areas of industrial activity marked on the modern Ordnance Survey mapping but not marked on the Ordnance Survey 1955 mapping and that does not fall into one of the more specific industrial categories. These will generally include modern industrial estates and business parks but not retail parks which fall under the Civic and Commercial, Commercial and Retail type.

Other Industrial (41)

Areas of industrial activity that do not fit into any of the other industrial types.

Brick Works (44)

Areas marked on Ordnance Survey maps as brick works.

Description:

This type is predominantly found in and around major settlements in Warwickshire, in particular Warwick, Leamington, Rugby, Nuneaton, Bedworth and Atherstone with a scattering in Solihull. There are other much larger industrial complexes which

are more recent developments and these are mainly found in North Warwickshire. Smaller industrial estates are found along main roads between smaller settlements. Previous industrial complexes are mostly made up from the large number of brick works that once littered the county; these are generally found in the central part of Warwickshire. One very large area that is recorded as a previous industrial complex is the medieval pottery industry at Chilvers Coton just east of Nuneaton (Mayes and Scott, 1984). Few areas have continuity of industrial complexes from the 1880s onwards; the few exceptions are some small industrial estates found in Warwick and Stratford and a few small areas that once formed brick works and have since developed into other types of light industry.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Moderately (48%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (6%)

Reason for change (1880-2001):

Continuing expansion of industry from the industrial revolution. This slowed somewhat towards the end of the 20th century but still continues to expand.

Factors influencing further change:

Older and disused industrial buildings that are often in urban areas are at risk of being demolished and re-developed as pressure is put on increasing populations in urban areas. Global economic factors

can affect the development or decline of this type.

Biodiversity Potential:

Low - Some buildings or areas may be of some value to wildlife but generally by their nature offer little in terms of biodiversity.

Archaeological Potential:

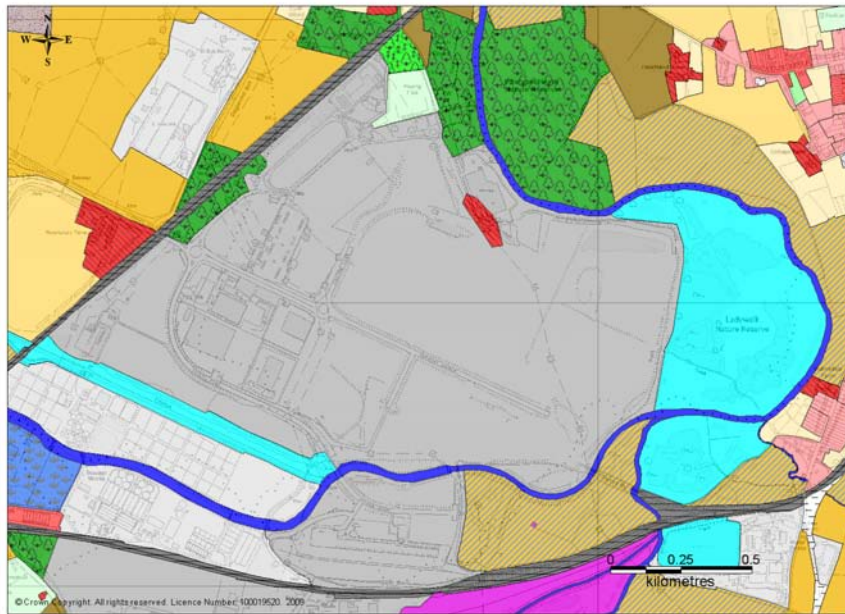
Medium - The archaeological potential will be determined by the location and nature of the industrial site. Generally those closer to the historic core of urban areas may have the greater potential for archaeological deposits although they may have destroyed much of them. Older industrial sites will have intrinsic industrial archaeology interest. By their nature more modern industrial sites can be quite destructive and have less archaeological value. Some modern industrial sites are within designed landscapes or converted from country houses.

Management:

Where possible, preserve the built form of older and more important industrial buildings since these may well contribute to local distinctiveness. Newer industrial sites will probably need less management in terms of their historic or archaeological value. Local Development Framework policies in respect of Brownfield sites need to consider the potential for industrial archaeology assets.

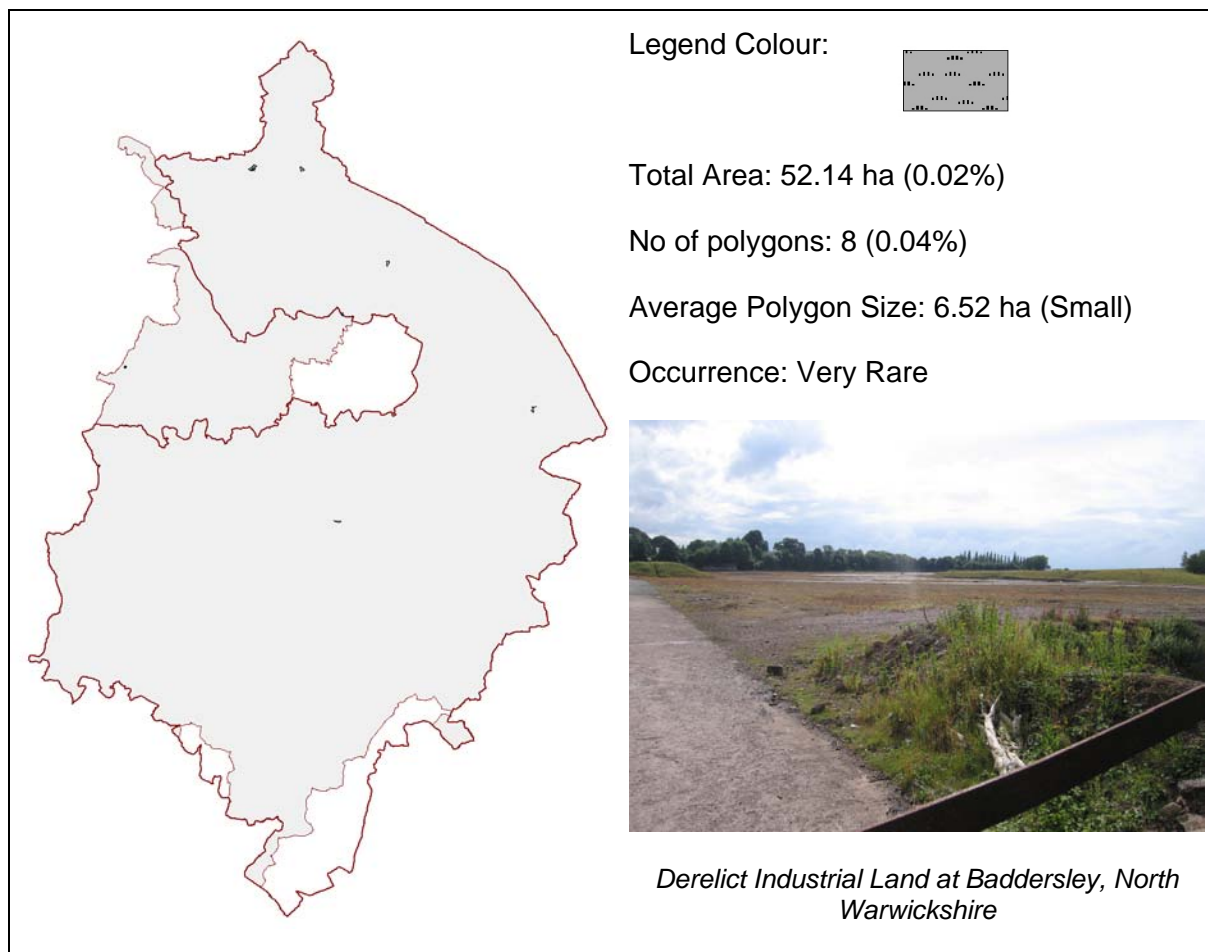
Research:

The industrial landscape of Warwickshire is not fully understood especially in terms of smaller industrial complexes and is inadequately recorded. Their origins and development could be explained better.



Hams Hall Industrial Estate, North Warwickshire

Derelict Industrial Land (40)



Definition:

Areas of land that previously were of industrial use and have been cleared but which subsequently have had no development on them.

Sub-types:

Derelict Industrial Land

Description:

There is very little derelict industrial land in Warwickshire. This is probably due to the intensive use of land in Warwickshire whereby most post-industrial areas are used for other purposes such as woodland, agriculture, settlement or civic amenities. The little derelict land that does exist occurs mainly in the northern half of the county.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (17%)

Reason for change (1880-2001):

The beginning of the 20th century saw a dramatic fall in industrial sites and many of them developed into derelict sites. In the later 20th century these sites were more intensively developed as pressure increased on Brownfield sites in urban areas.

Factors influencing further change:

Global economic factors can affect the development or decline of this type.

Biodiversity Potential:

Some buildings or areas may be of some value to wildlife but generally by their nature they offer little in terms of

biodiversity. In their derelict state it may be that biodiversity increases as natural processes take hold and the sites are less managed.

Archaeological Potential:

Medium - The archaeological potential will be determined by the location and nature of the industrial site. Generally those closer to the historic core of urban areas may have the greater potential for archaeological deposits although they may have destroyed much of them. Older industrial sites will have intrinsic industrial archaeology interest. By their nature more modern industrial sites can be quite destructive and have less archaeological value. Some modern industrial sites are within designed landscapes or converted from country houses.

Management:

Ideally any historically or archaeologically sensitive sites should have management programmes to maintain them and keep them in a good state of repair. Any development should take into account the historic character of the industrial site. Local Development Framework policies in respect of Brownfield sites need to consider the potential for industrial archaeology assets.

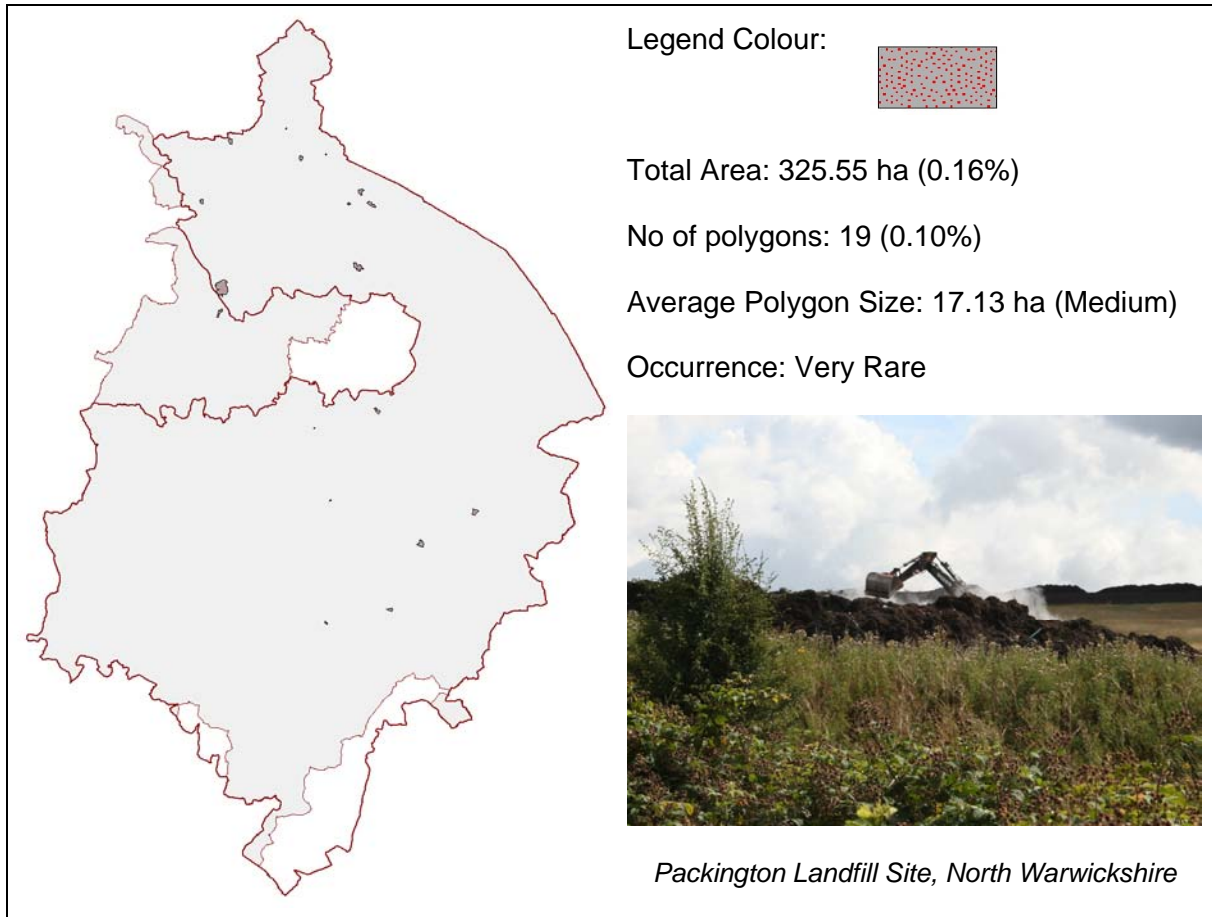
Research:

The industrial landscape of Warwickshire is not fully understood especially in terms of smaller industrial complexes and is inadequately recorded. Their origins and development could be explained better.



Derelict Industrial Land near Kingsbury, North Warwickshire

Waste Tip (42)



Definition:

Areas of land that have been used for the large scale dumping or filling or rubbish. This type will include landfill sites and large domestic rubbish dumps.

Sub-types:

Waste Tip

Description:

This type is quite rare in Warwickshire but what little that does occur is found mainly in North Warwickshire and the north eastern part of Stratford-on-Avon District. Most of the time these sites are used to fill in old mineral extraction or industrial sites. A few small domestic refuse tips are also recorded.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (89%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (82%)

Reason for change (1880-2001):

As populations expanded in the 20th century so too has the need to dispose of the waste humans produce.

Factors influencing further change:

Increasing population, recycling and producing less waste, European and government restrictions on the production of waste.

Biodiversity Potential:

Low - These areas by their nature tend to have a low variety of wildlife and species although some are attracted to it as a food source.

Archaeological Potential:

Low - These areas usually are as a result of infilling of extractive areas, consequently the archaeological resource

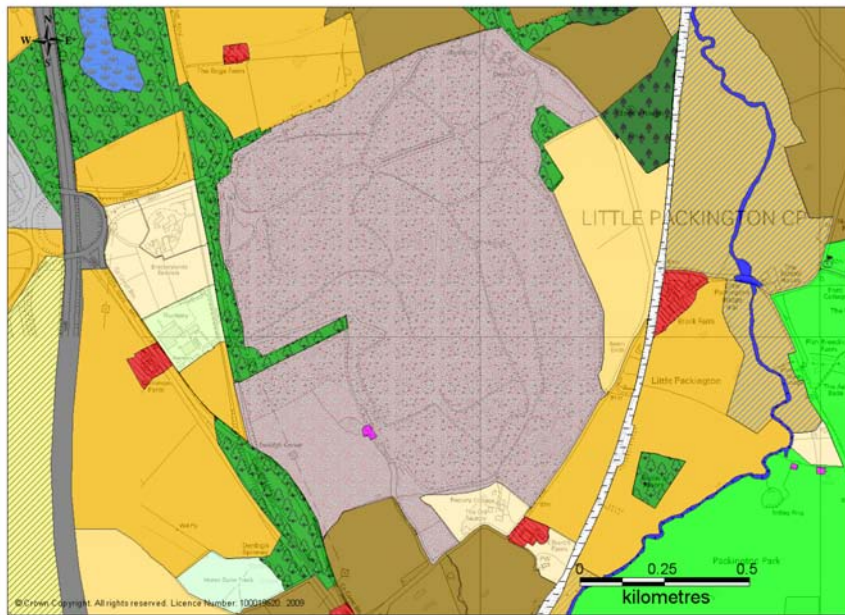
will already have been destroyed. Occasionally on the periphery of this type there may be some historic industrial remains.

Management:

A few sites such as Judkins Mount, Nuneaton will lend distinctiveness to the landscape, whilst Packington landfill site is one of Europe's largest waste tips and continues to grow (grownupgreen, 2010).

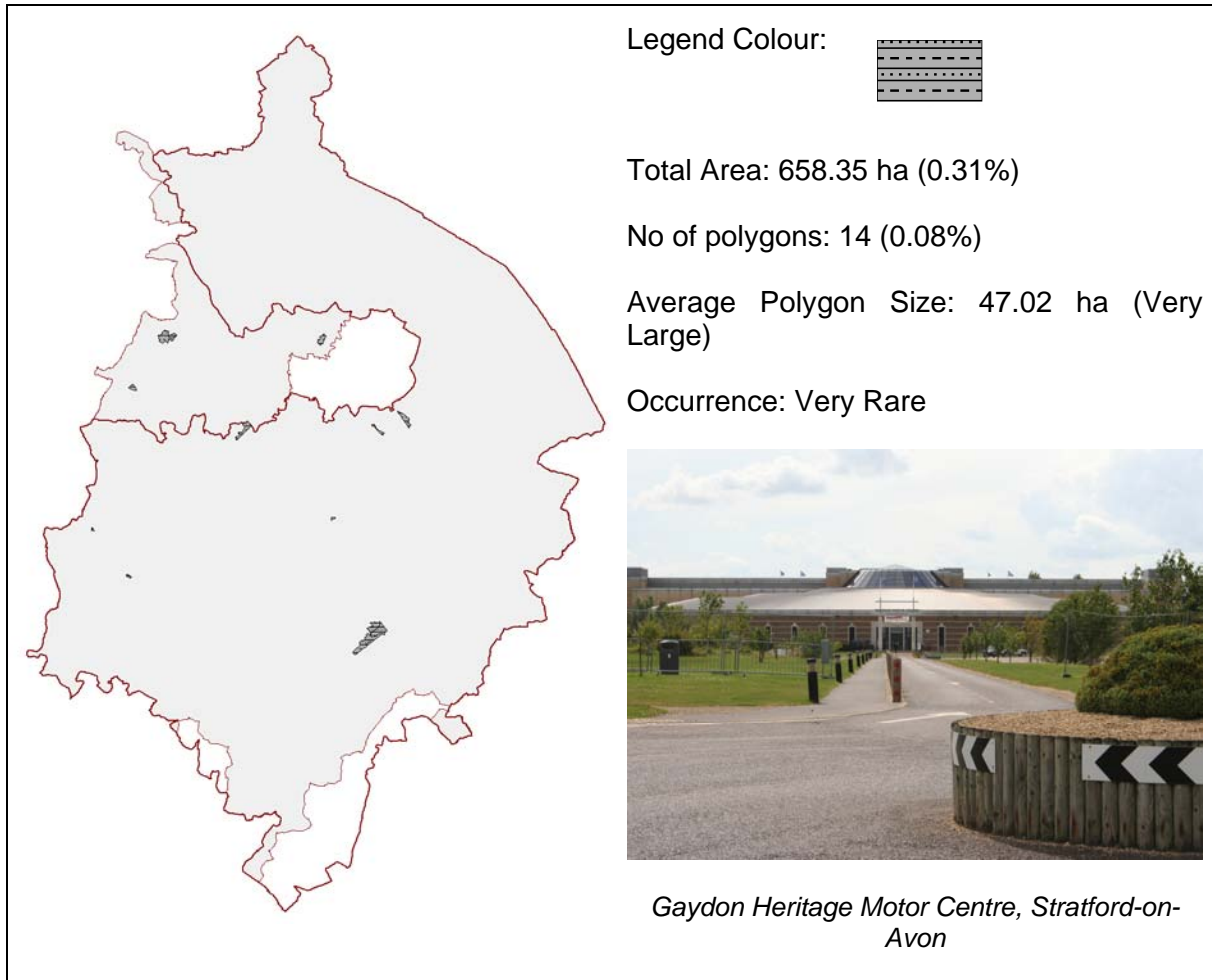
Research:

Because most of these areas are old extraction sites the research agenda identified in the ALSF project: Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire (2008) will be generally applicable.



Packington Landfill site, North Warwickshire

Motor Industry (45)



Definition:

Areas of land with industrial activity related to the motor industry.

Sub-types:

Motor Industry

Description:

This is concentrated in certain parts of the county, mostly around the edge of Coventry, in Solihull and with the largest site forming the motor testing tracks and facilities at Gaydon. This industry was still expanding from the post-war period until very recently and has just started to decline.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (95%)

Trajectory of Change (1955 – 2001):

Declining Slowly (-6%)

Reason for change (1880-2001):

In England the motor industry started at the beginning of the 20th century and saw a rapid expansion before peaking and starting to decline in the later 20th century.

Factors influencing further change:

Supply and demand of world car market. The probable continued decline of the motor industry in the UK.

Biodiversity Potential:

Low - Some buildings or areas may be of value to wildlife but generally by their nature they offer little in terms of biodiversity.

Archaeological Potential:

Low-medium - These areas are usually quite destructive to archaeology but they have begun to form their own field of interest in industrial archaeological terms. Some of the sites are in areas of designed parks and gardens and others on World War Two sites such as airfields.

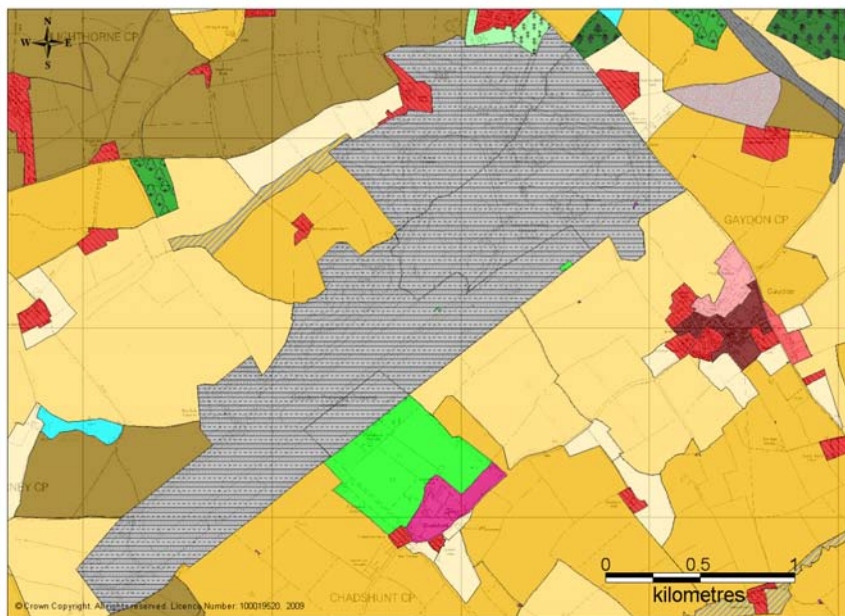
Management:

To maintain and preserve any significant historic or archaeological features where possible. Any development or change

should appreciate the character of this type.

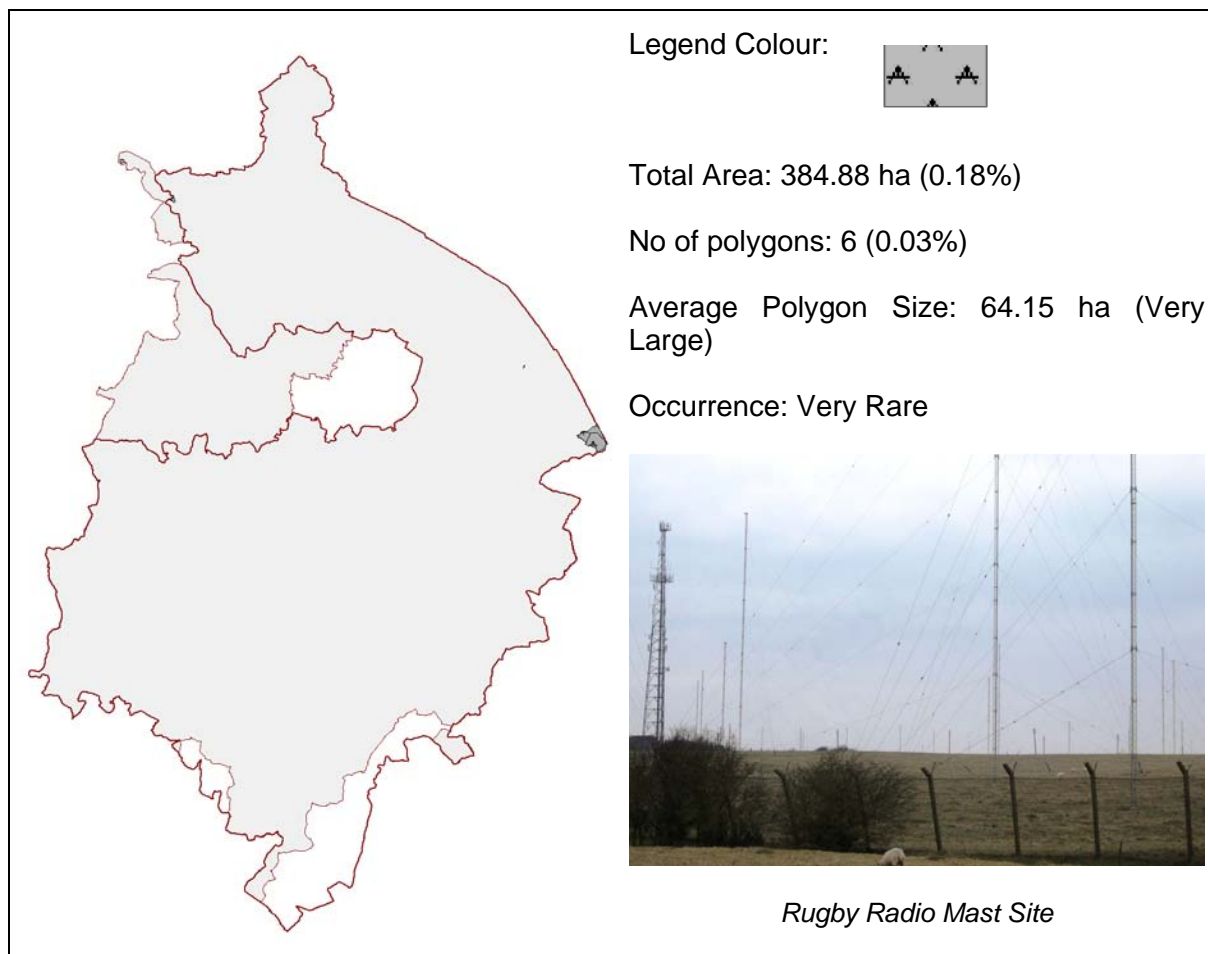
Research:

Substantial work has already been carried out on the history and development of the motor industry in the UK, especially in areas such as Coventry and Birmingham; however peripheral areas like Warwickshire have had less attention despite the important plants, factories and test tracks.



Gaydon Motor Testing Tracks and Motor Heritage Centre

Radio/Tele-communications (46)



Definition:

Areas that are clearly marked on Ordnance Survey mapping as large scale radio/telecommunications works.

Sub-types:

Radio/ Tele-communications

Description:

This type is restricted to four discrete areas in Warwickshire. The Rugby Radio Mast area, just to the east of Rugby, is by far the biggest, around 350 hectares in size. It has a unique history originating in 1926, transmitting time signals and possibly playing a role in the cold war by communicating with nuclear submarines. Recently the site was being slowly dismantled and its future remains uncertain but has been designated as a potential area of expansion for the settlement of Rugby. Other sites consist of smaller radio and TV transmitter stations.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

This technology and subsequent industry expanded rapidly during the first half of the 20th century. It has remained stable but recently appears to be in decline as the technology develops and some parts become obsolete.

Factors influencing further change:

Changes in technology. Increased cable networks, increased wireless communications. Increasing demand.

Biodiversity Potential:

Medium - Although the actual structures themselves have a low potential, the area in which they are situated usually forms semi-improved grassland which has good potential for a variety of species and is covered under the UK BAP Priority Habitats.

Archaeological Potential:

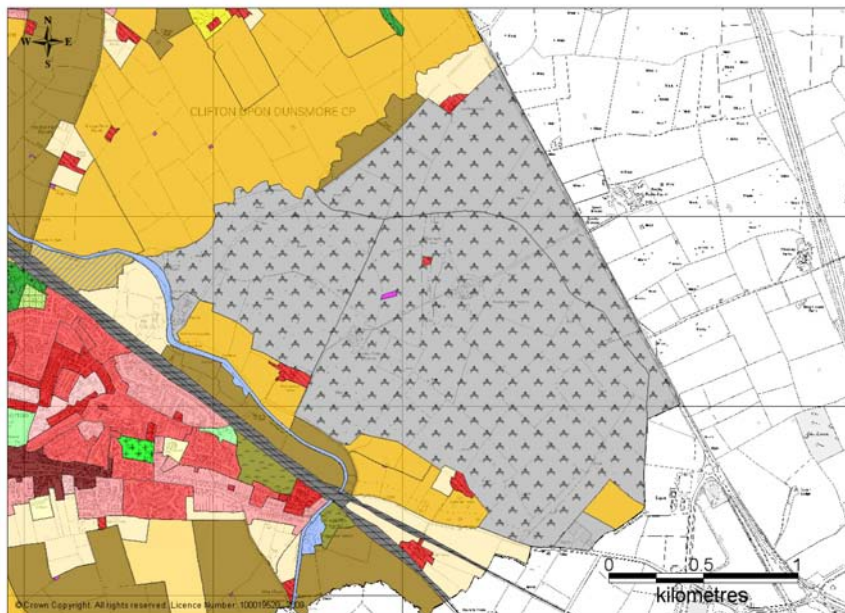
Medium - Despite being an industrial type the impact on archaeology is often quite low with most being above ground disturbance. Often these areas have ridge and furrow and prehistoric remains. The telecommunications structures themselves may have national Historic Environment Significance

Management:

To maintain and preserve any historic or archaeological features where possible. Carry out assessment of archaeological potential before major developments take place and manage as appropriate.

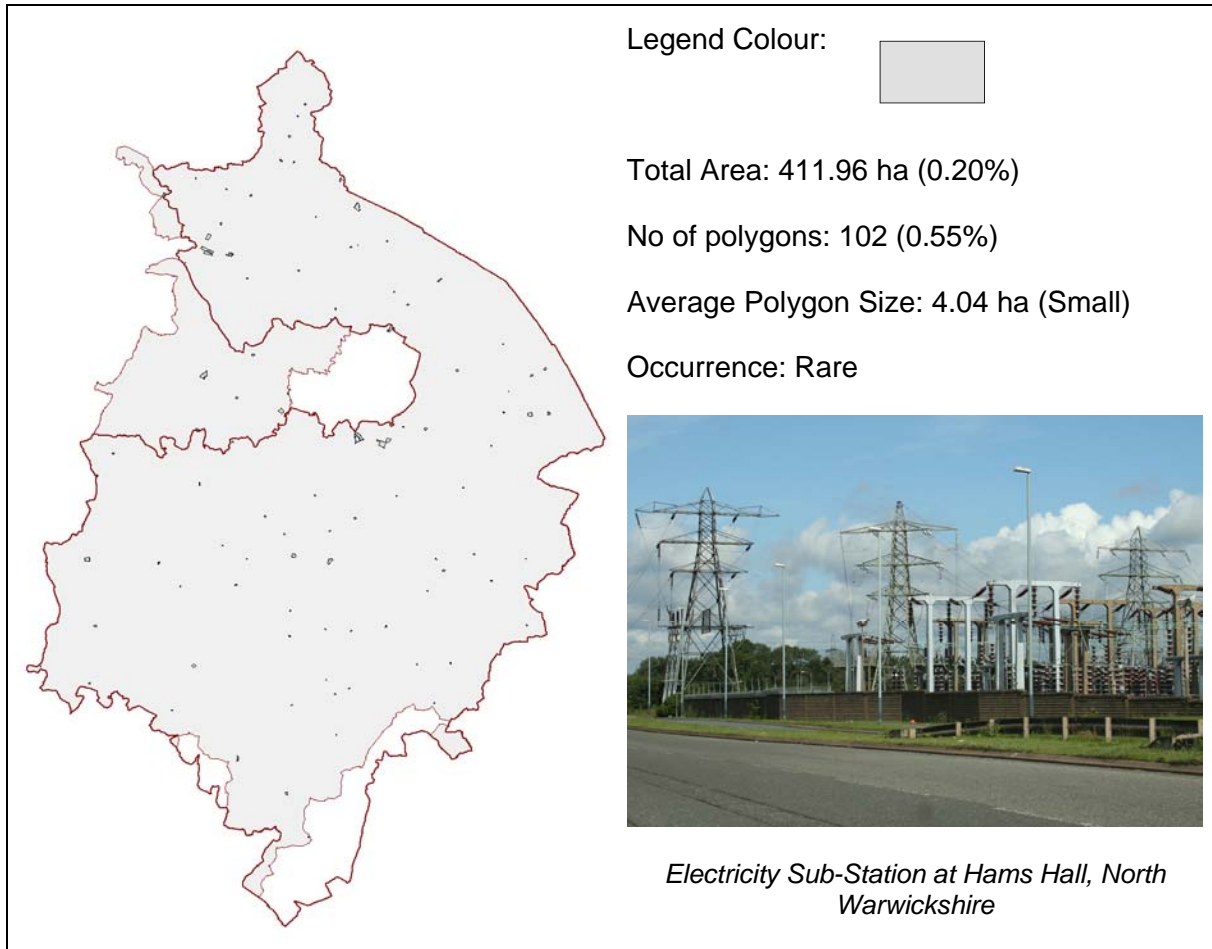
Research:

Some radio-telecommunication sites like the Rugby Radio Mast site have received substantial study (see: http://www.subbrit.org.uk/sb-sites/sites/r/rugby_radio/index.shtml) while smaller sites have not. The potential of archaeology on these sites has not been fully realised.



Rugby Radio Mast Site

Utilities (43)



Definition:

Industrial areas that can be identified as related to the utility industries. This type will generally include sewage works, water treatment works, power stations and gas works.

Sub-types:

Utilities

Description:

Most of these sites are sewage works and these tend to form small areas predominantly just outside the main towns and villages and are scattered widely across the county. By their nature most areas tend to be near a natural water source. Most date to the early 20th century, with a handful of earlier sites. There are a few other types of utilities sites such as electricity and gas related plants but these are few and far between. Some sites have now changed including

the largest which was Hams Hall Power Station, this is now a modern industrial distribution park. Other smaller sewage works close to historic settlement cores have seen the town or village expand around them and have subsequently been replaced.

Period:

19th - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (55%)

Trajectory of Change (1955 – 2001):

Declining Critically (-50)

Reason for change (1880-2001):

These increased in the first half of the 20th century linked to the increase in population and demand for utilities. In the later 20th century as technology has developed this type has seen a rapid decline in the total

area of the landscape taken up with utilities works.

Factors influencing further change:

Population changes, urban expansion, changes in technology and reliance on utilities.

Biodiversity Potential:

Low-Medium - Some utilities areas have small areas of land that attract a wider variety of wildlife but by their nature they are industrial sites and consequently often have a low potential for biodiversity.

Archaeological Potential:

Low - Most of these sites display a complete lack of archaeological sites; this may be because of their location or the

lack of fieldwork for these sites when they were created as well as their quite destructive nature. However some sites remain such as the Roman features that were part of an extensive villa complex, recorded at the Severn Trent Water installation at Pillerton Priors (Macey, 2002). Some of the historic utilities sites themselves have proven to be of archaeological interest.

Management:

New sites or changes to utilities especially infrastructure should be managed accordingly.

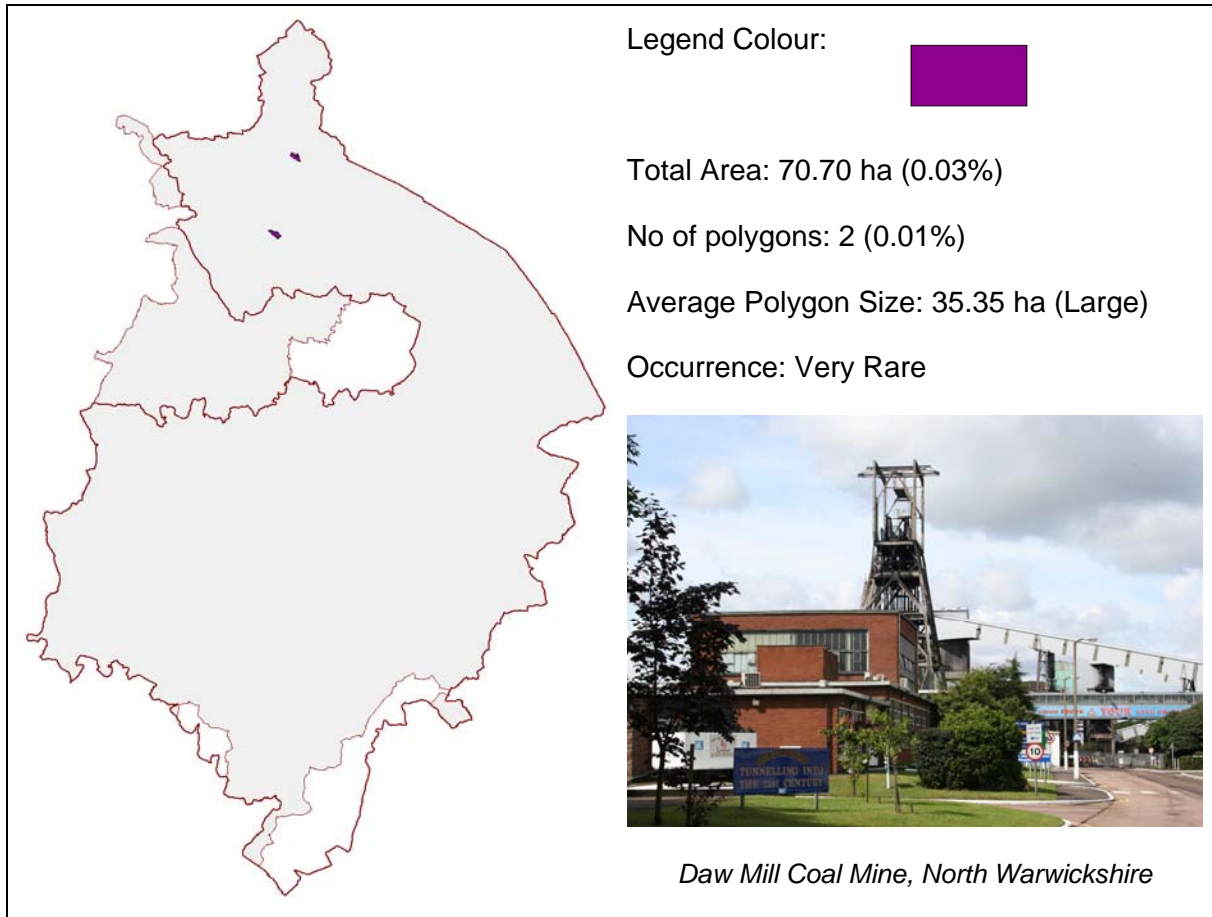
Research:

The history of the development of utilities in Warwickshire could be explored.



Electricity Sub Station near Hams Hall, North Warwickshire

Coal Extraction (47)



Definition:

Areas of land that relate to the coal mining industry.

Sub-types:

Coal Extraction

Description:

There are only two sites recorded as coal extractive sites. One is Daw Mill Mine, a deep coal mine, currently active and the most productive coal mine ever in Britain producing 3.2 million tons of coal in 2008 (<http://www.ukcoal.com/dm-daw-mill>). The other site is Baddesley colliery which closed in 1989 and remains unused. Warwickshire has a long history of coal extraction and previous HLC types show the pattern in North Warwickshire stretching from the northern part of Coventry and heading in a slight arc north west through Bedworth, on the far west of Nuneaton and then towards Polesworth. A few other sites are just to the west of this

area following a similar arc shape. Two possible sites are located just south of Coventry and this could be the southern extreme edge of the coal field. Coal extraction in Warwickshire is marked on 18th century maps and probably took place much earlier. The impact has been huge in North Warwickshire and around Nuneaton and Bedworth.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Declining Critically (-54%)

Trajectory of Change (1955 – 2001):

Declining Critically (-85%)

Reason for change (1880-2001):

The coal industry in Warwickshire was already in decline at the beginning of the 20th century and has continued to decline

until the present day where only one active coal mine exists.

Factors influencing further change:

This depends largely on the coal industry and national and global supply and demand for coal. The last coal mine in Warwickshire is highly productive and unlikely to close or develop greatly in terms of surface extent in the near future.

Biodiversity Potential:

Low - Most of the coal mine is underground. The little of the mine that is on the surface mostly consists of industrial activity and waste land with low biodiversity.

Archaeological Potential:

Low - There are some industrial sites of some historic interest related to the coal mines, and certainly older coal mining

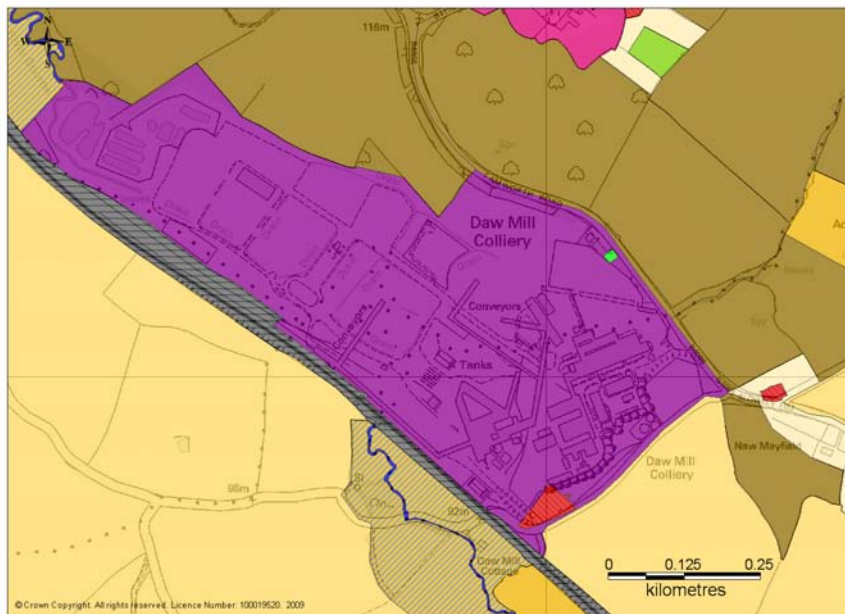
features may be of some value. Other archaeological potential is uncertain.

Management:

For previous coal mines or older sites the historic remains should be preserved where possible. Sometimes opportunities exist to promote the mining heritage in these areas; a good example of this is at Pooley Country Park Heritage Centre.

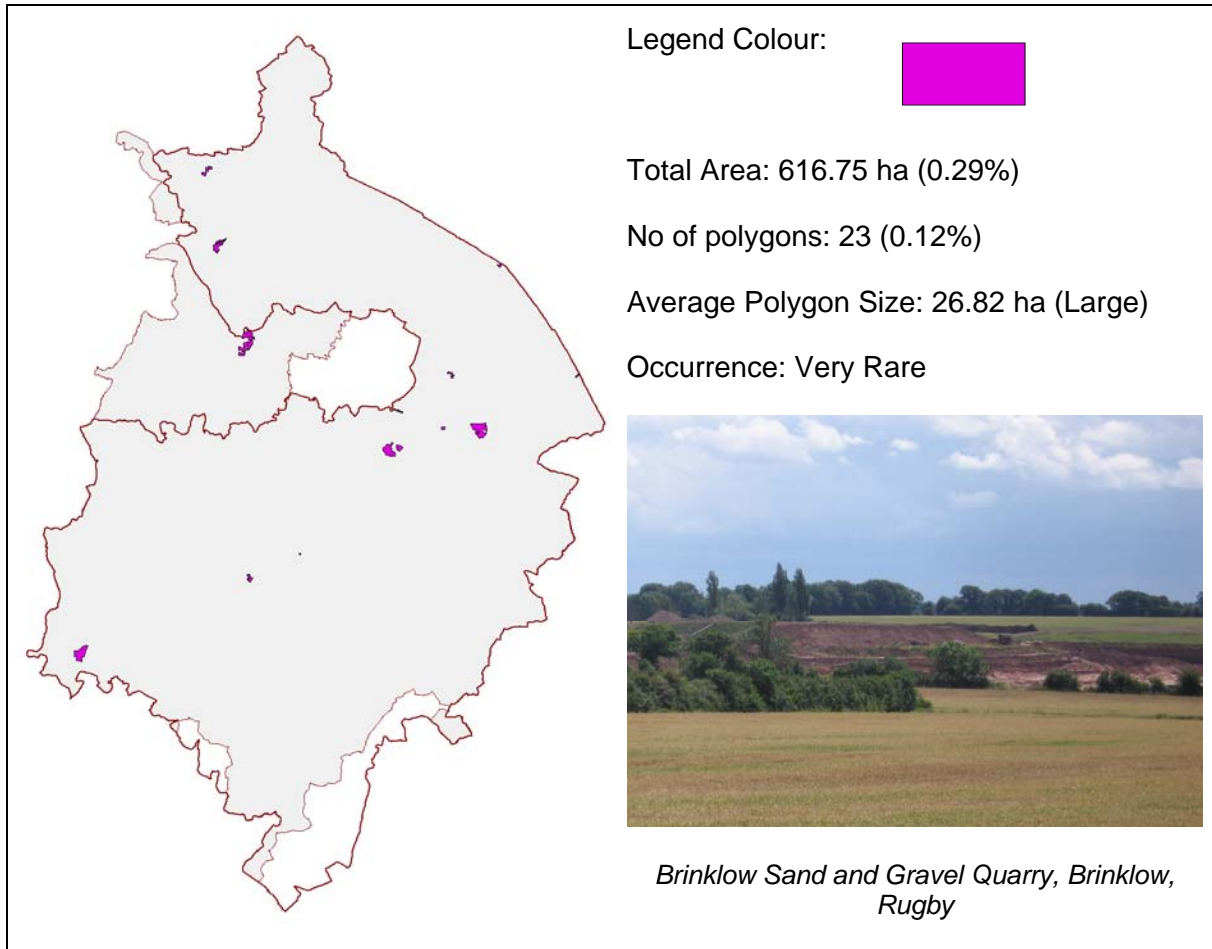
Research:

The origins and early development of coal mining in Warwickshire is not fully understood. The Warwickshire coalfield has been studied to some extent (Grant, 1982) but more could be done to identify early coal mining remains. It is also unclear when surface coal mining started in Warwickshire and the extent and development of the highly industrial mines in the 18th and 19th centuries.



Daw Mill Coal Mine, North Warwickshire

Sand and Gravel Extraction (48)



Definition:

Areas of land that relate to the sand and gravel extraction industry.

Sub-types:

Sand and Gravel Extraction

Description:

Sand and Gravel extraction in Warwickshire has and continues to be a well exploited resource. The areas in Warwickshire that contain these extraction sites are mostly centred on deposits associated with rivers and river terraces. The biggest exception is Ling Hall quarry which is on the Dunsmore Plateau. The main other active sites are around the river Avon and the Tame but previous extraction also took place along the Anker. This industry has declined in the last 100 years where generally smaller more scattered quarries were formed. In the second half of the 20th century this decline

has slowed and there is now a focus on generally larger areas for exploitation. Post-extraction these sites are usually infilled, more recently usually with waste. If they are left with no active use of the land they form scrub areas; however most are reused as farm land, planted with trees or the land is put to other uses such as Kingsbury Water Park which takes advantage of the natural water ingress post-extraction, forming a unique country park for Warwickshire.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-46%)

Trajectory of Change (1955 – 2001):

Declining Rapidly (-43%)

Reason for change (1880-2001):

The change at the beginning of the 20th century is related to a decline in the industry as the large easily accessible deposits were exploited. In the latter part of the 20th century the industry developed further becoming more intensive on fewer sites, part of this may have been due to post World War Two reconstruction.

Factors influencing further change:

This depends largely on the aggregates industry which is still experiencing a high demand due to the expanding built environment. Post-extraction the landscape has the potential to be developed into a variety of types including settlement, farmland, woodland, parks, nature reserves or left as waste scrub areas.

Biodiversity Potential:

Low - Natural resources are often destroyed from extractive activity. However, when activity ceases the biodiversity potential increases as the landscape changes to a different type.

Archaeological Potential:

Medium-High - Sand and gravel sites often contain archaeological sites particularly those of prehistoric origin although Roman or Romano-British remains can also be

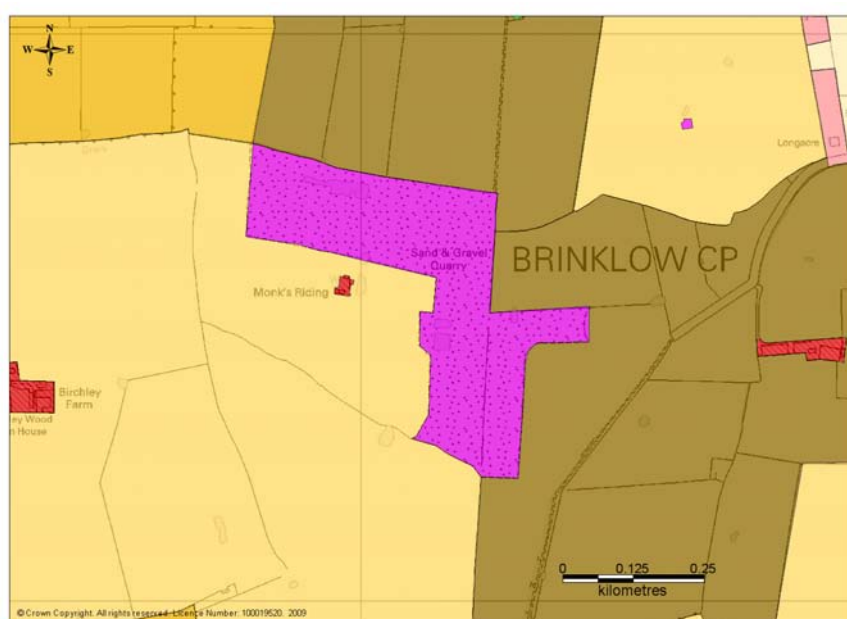
found. Although much of the archaeology is destroyed once the excavation of aggregates process begins, sometimes fragments survive on the margins post-extraction.

Management:

Where possible any potential archaeology should be accounted for in these areas prior to extraction but once these areas have been extracted the archaeological resource has often gone. Any significant historic industrial remains should be preserved or integrated into any later development. The possibility of preserving or re-investigating margins of extraction before redevelopment into another land type should be investigated. Opportunities may exist to create heritage parks or trails.

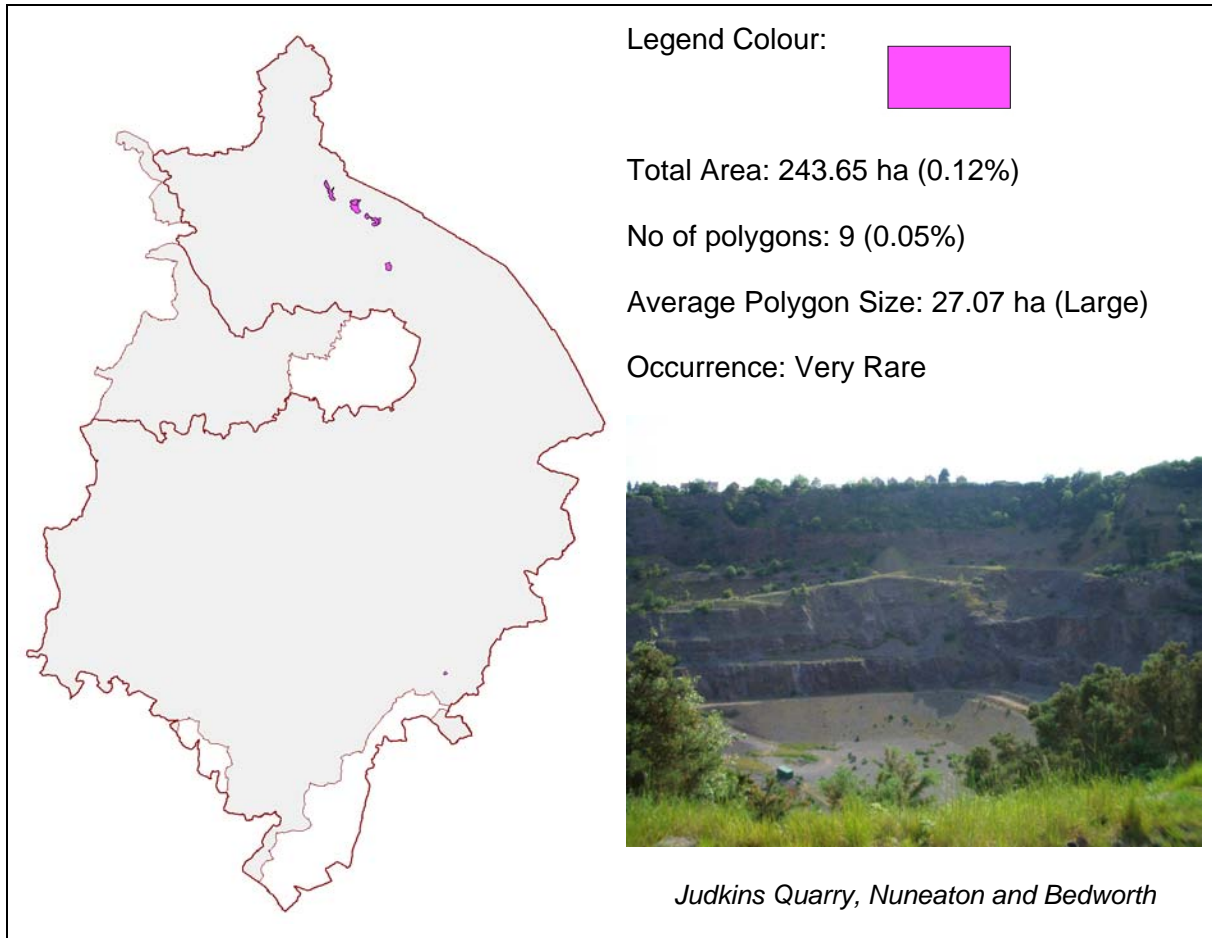
Research:

The ALSF project: Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire was published in 2008 and has a number of research recommendations that are relevant to these areas. An ongoing project undertaken by the National Association of Mining History Organisations (NAMHO) seeks to identify the research potential of extraction sites and to develop a framework for the future (NAMHO, 2010).



Brinklow Sand and Gravel Quarry, Brinklow, Rugby

Hard Rock Extraction (49)



Definition:

Areas of land that relate to the hard rock extraction industry.

Sub-types:

Hard Rock Extraction

Description:

The hard rock extraction in Warwickshire is almost exclusively concentrated in the north of the county in an area to the west of Nuneaton. One other site is found in the south east of the county. Like other extractive industries this has shrunk in the last 100 years and previous hard rock extraction can be found scattered throughout the county. Of course the location of sites is always related to the geology of the rock being extracted and therefore usually forms disconnected bands where the geology runs. After extraction these sites are usually in-filled, recently often with waste. If they are left with no active use of the land they form

scrub areas; however, most are now reused as farm land or planted with trees.

Period:

18th - late 20th century (although some small scale extraction takes place from the medieval period onwards)

Trajectory of Change (1880s – 1955):

Declining Critically (-83%)

Trajectory of Change (1955 – 2001):

Declining Rapidly (-28%)

Reason for change (1880-2001):

The change at the beginning of the 20th century is related to a decline in the industry as the large easily accessible deposits were exploited. In the later part of the 20th century the industry developed further becoming more intensive on fewer sites; the net result is less extractive sites.

Factors influencing further change:

This largely depends on the industry and supply and demand for the hard rocks being extracted. Post-extraction, the landscape has the potential to be developed into a variety of types including settlement, farmland, woodland, parks, natures reserves or left as waste scrub areas.

Biodiversity Potential:

Low - The nature of this type is that natural resources are often destroyed from extractive activity. However when activity ceases the biodiversity potential increases as the landscape changes to a different type.

Archaeological Potential:

Medium - Hard Rock sites can contain archaeological sites, although much of the archaeology is destroyed once the excavation of aggregates process begins,

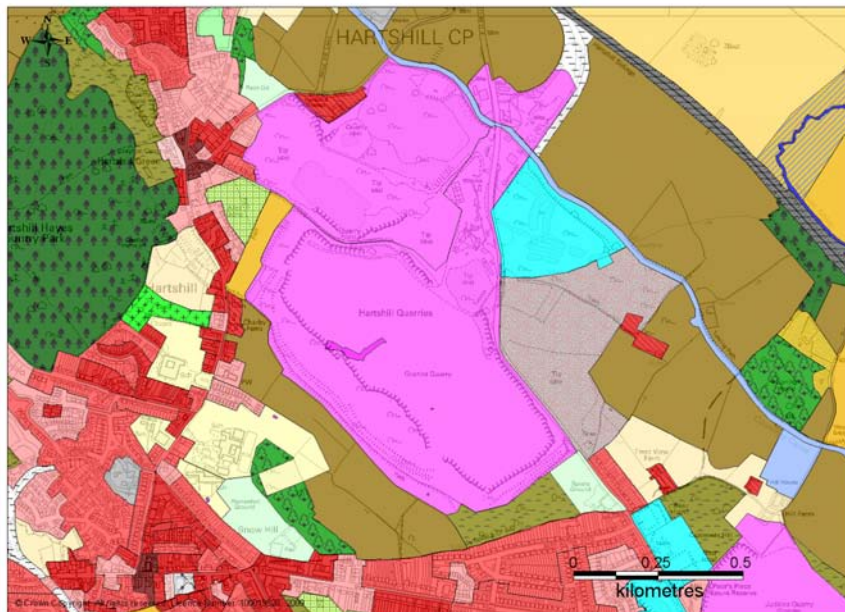
sometimes fragments survive on the margins post extraction. The historic industrial remains are also of interest.

Management:

Where possible any potential archaeology should be accounted for in these areas prior to extraction but once these areas have been extracted the archaeological resource has often gone. Any significant historic industrial remains should be preserved or integrated into any later development. The possibility of preserving or re-investigating margins of extraction before redevelopment into another land type should be investigated. Opportunities may exist to create heritage parks or trails.

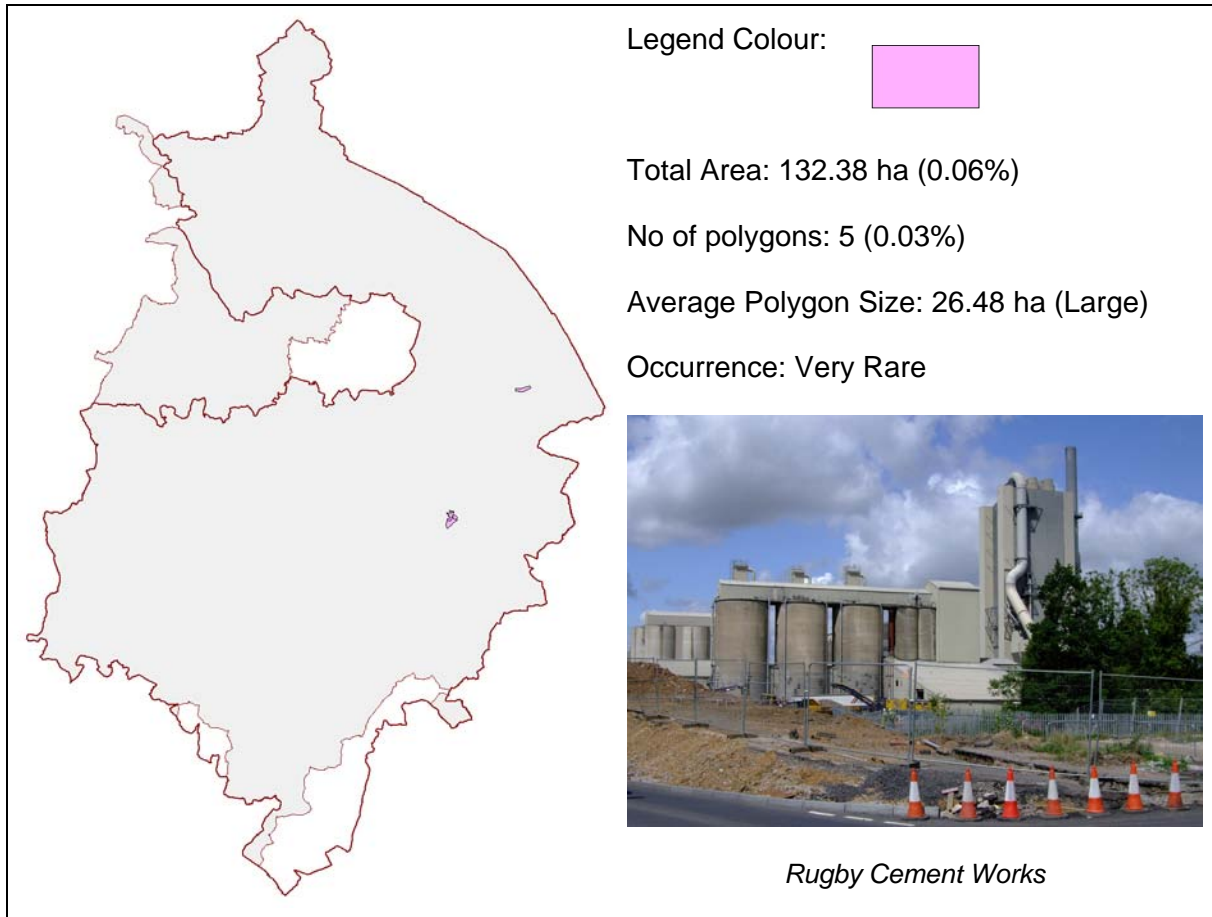
Research:

The ALSF project: Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire was published in 2008 and has a number of research recommendations that are relevant to these areas.



Hartshill Quarries, North Warwickshire

Cement Works (51, 115)



Definition:

Areas of land that relate to the cement or lime extraction industry.

Sub-types:

Cement Works (51)

Areas of land that relate to the cement industry.

Lime Works (115)

Areas of land that relate to the lime extraction industry.

Description:

These form two distinct areas in the county, both as lias limestone, the first just east of Rugby and the second just north of Southam and west of Stockton. Previous cement and lime works are also found in the same areas with some a little further west of Rugby and others just south and west of Southam. The cement works continue to be an important industry for Rugby and Stockton. Stockton itself

expanded as a village after the start of lime and cement works. A model village was also created for some of the workers just outside the cement works.

Period:

18th - late 20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-46%)

Trajectory of Change (1955 – 2001):

Declining Rapidly (-21%)

Reason for change (1880-2001):

The change at the beginning of the 20th century is related to a decline in the industry as the large easily accessible deposits were exploited. In the later part of the 20th century the industry developed further, becoming more intensive on fewer sites; the net result is fewer extractive sites.

Factors influencing further change:

This depends on the demand for this industry but appears to be relatively stable at the moment. Post-extraction the landscape has the potential to be developed into a variety of types including settlement, farmland, woodland, parks, nature reserves or left as waste scrub areas.

Biodiversity Potential:

Low - The nature of this type is that natural resources are often destroyed from extractive activity. However, when activity ceases the biodiversity potential increases as the landscape changes to a different type.

Archaeological Potential:

Medium - These areas can contain historic industrial features and possibly some prehistoric features but much of the archaeology is destroyed once extraction

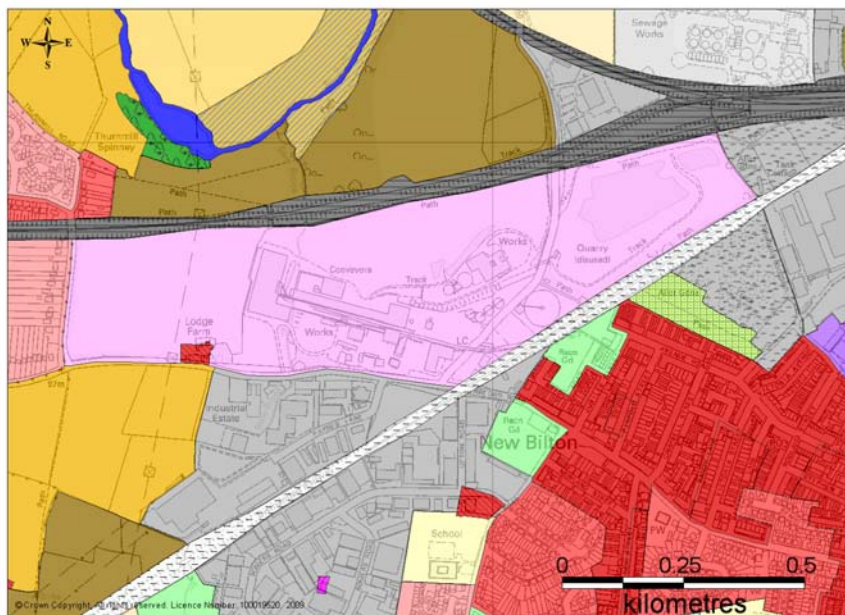
begins. Occasionally fragmented areas of archaeological deposits may survive on the margins.

Management:

Where possible any potential archaeology should be accounted for in these areas prior to extraction but once these areas have been extracted the archaeological resource has often gone. Any significant historic industrial remains should be preserved or integrated into any later development. The possibility of preserving or re-investigating margins of extraction before redevelopment into another land type should be investigated. Opportunities may exist to create heritage parks or trails.

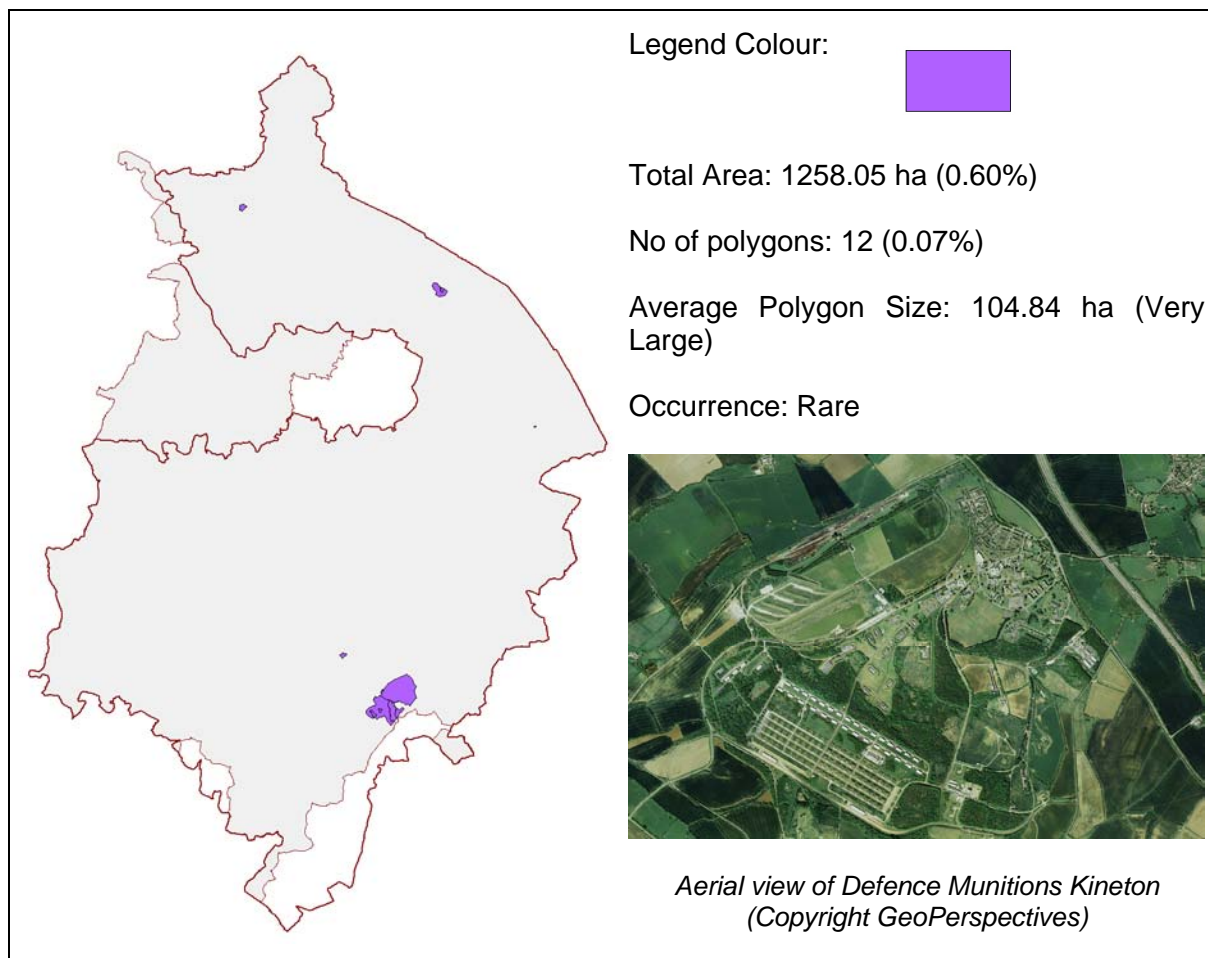
Research:

The origins and development of cement works and lime works in Warwickshire are not fully understood, especially the extent and nature of any industrial archaeological remains.



Rugby Cement Works

Military Sites (53, 52)



Definition:

Military bases and storage facilities identified from Ordnance Survey mapping. This includes military airfields, hostels and temporary camps associated with World War Two that are recorded as a previous HLC type but are now gone.

Sub-types:

Barracks/Training Ground (52)

Military bases identified from Ordnance Survey mapping.

Military Depots (53)

Military storage facilities identified from Ordnance Survey mapping.

Description:

There are very few active military sites in Warwickshire with Defence Munitions Kineton dominating in both size and activity. This site itself has an interesting history, having been created as a

munitions store during World War Two. The area it occupies is very large (approximately 1,100 hectares) and has taken over a number of discrete types, mostly irregular/piecemeal enclosure with areas of ridge and furrow. Other military sites include the much smaller Gamecock Barracks, celebrated for being the most inland location for the Royal Navy, and a firing range just outside Kingsbury (ironically next to a major industrial oil distribution site). Previous military sites are mostly former World War Two RAF airfields and temporary camps scattered throughout the county, with a concentration mainly in the south.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Moderately (48%)

Trajectory of Change (1955 – 2001):

Declining Critically (-68%)

Reason for change (1880-2001):

An increase of military sites during the Second World War can be seen in the area with airfields, camps, factories and others. This then went into critical decline with only a few sites left in Warwickshire, mainly based at DM Kineton.

Factors influencing further change:

Increasing pressure on existing sites owned by the Ministry of Defence as downsizing takes place on many military sites after the cold war. These sites are often regarded as suitable for new housing.

Biodiversity Potential:

Medium-High - In Warwickshire the military areas are dominated by DM Kineton which contains a large area managed to improve its wildlife and biodiversity. Other smaller sites may have a smaller potential for biodiversity.

Archaeological Potential:

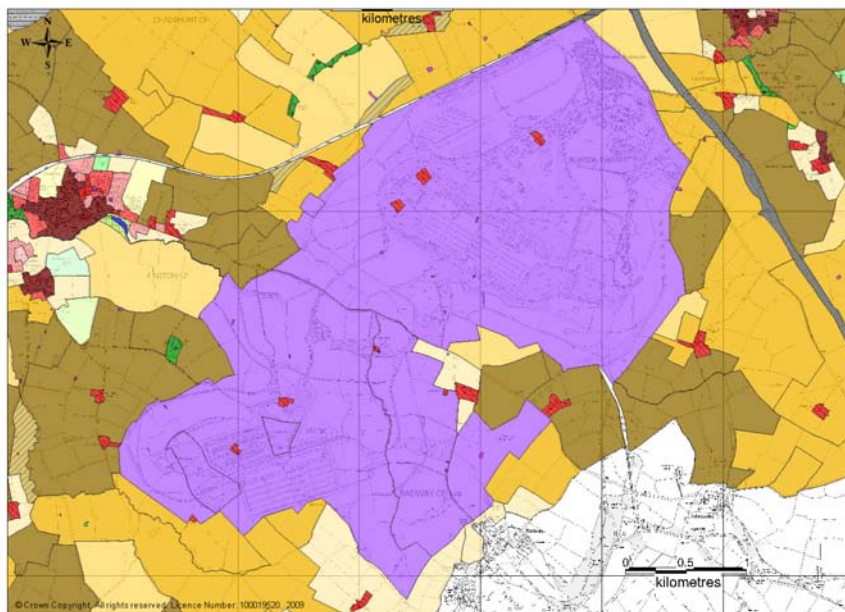
Medium - Despite intense activity by the military these areas often remain largely undeveloped and may contain important archaeological sites. DM Kineton extends over much of the area of the Registered Battlefield site of Edgehill (1642).

Management:

Consideration of archaeological and historic features should be part of any management plan used by the Ministry of Defence for each site. For previous military sites that may be derelict or have a different use, any proposed changes should include an assessment of historic and archaeological interest.

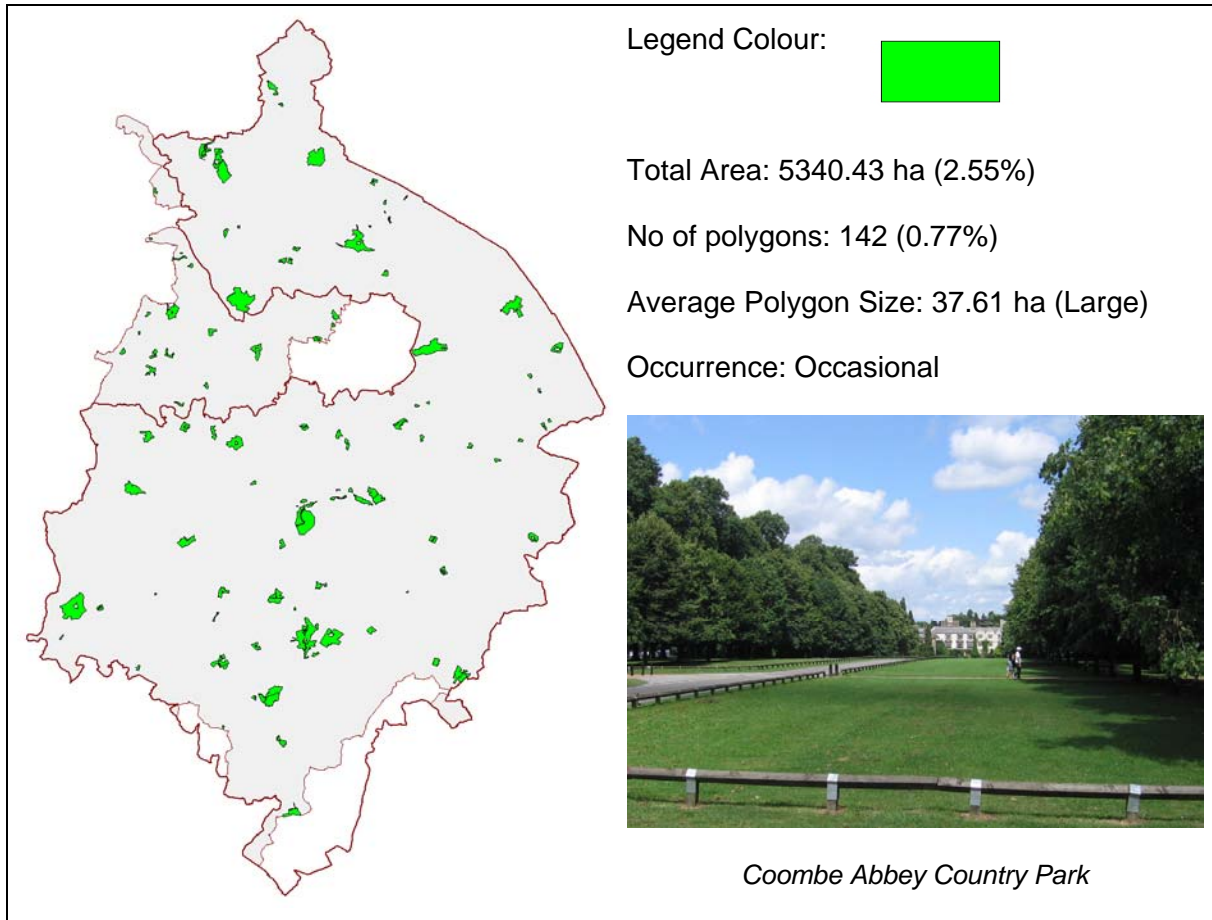
Research:

Comprehensive work has recently been published regarding military sites in Warwickshire (Steve Carvell, 2007). Gaps include First World War and earlier sites, especially airfields. Some work has been carried out at DM Kineton in terms of a management plan and research and investigation into the Battle of Edgehill, however little information is available about the history and developments of DM Kineton.



Defence Munitions Kineton

Park/Garden (56, 62)



Definition:

Areas identified as parks and gardens from English Heritage's Historic Parks and Gardens Register as well as Ordnance Survey mapping and any evidence from the Warwickshire Historic Environment Record. This type includes deer parks.

Sub-types:

Park/Garden (56)

Areas identified as parks and gardens from English Heritage's Historic Parks and Gardens Register as well as Ordnance Survey mapping and any evidence from the Warwickshire Historic Environment Record.

Deer Park (62)

Areas of parkland that have been specifically designed for the keeping of deer. Some of these may date back to the medieval period where the prime purpose of these parks was for hunting.

Description:

This type forms a significant area in Warwickshire and distribution is scattered widely across the county. There are concentrations of parks and most of the large ones can be found in the north and west of the county. Most of the parks have existed for over 100 years with more recent creations being generally smaller and confined to areas of settlement expansion such as Solihull, Warwick, Leamington and Nuneaton. Deer parks once formed large areas in Warwickshire, again mostly found in the north and west. The largest deer parks were Wedgnock and Kenilworth Chase, both running up to each other and together extending over 1,900 hectares. A large number of the parks that once existed have disappeared, most reverting back to farmland; these tend to be those associated with large country houses that declined in the first half of the 20th century. These parks and gardens were more widely scattered

across Warwickshire but again with a lack in the very south east of the county.

Period:

Medieval - late 20th century

Trajectory of Change (1880s – 1955):

Declining Critically (-85%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (135%)

Reason for change (1880-2001):

The sharp decrease of parks and gardens at the beginning of the 20th century is related to the dividing up and alternative use of the large country estates developed in the 18th and 19th centuries. A number of houses and estates did not fully recover from being requisitioned during World War Two. In the later 20th century more parks and gardens were established to satisfy an expanding population.

Factors influencing further change:

Not all are protected under designation and many are threatened from being converted to alternative uses such as golf courses or farmland. Areas of parkland that lie close to urban areas may be threatened from settlement expansion.

Biodiversity Potential:

High - These often contain a wide range of species, many often non-indigenous.

Archaeological Potential:

High - Parks and gardens by their nature have a high historical value and a rich diversity of sites and buildings. Many parks often show continuity, being built on

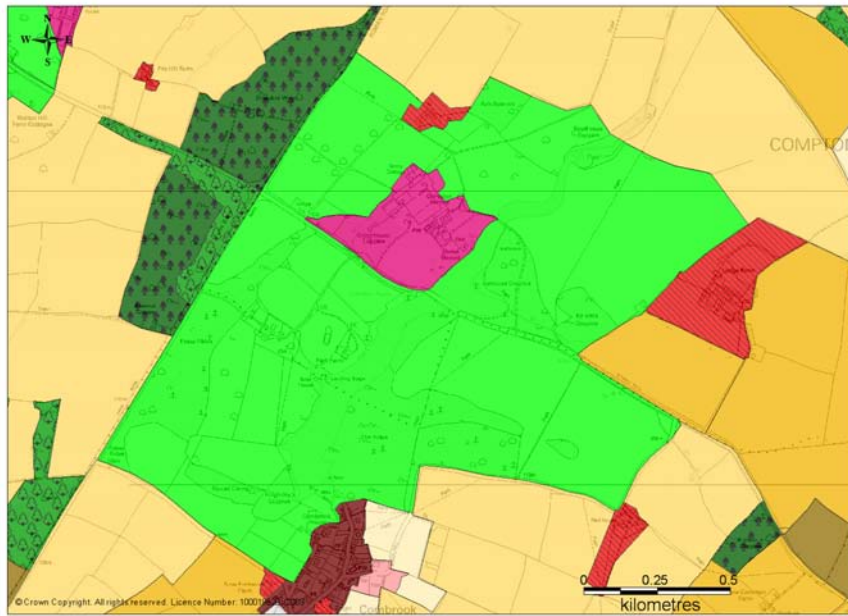
old manors, estates or even areas of deserted medieval settlement and the surrounding field systems. Others were often originally developed from medieval deer parks. Ridge and furrow has a good survival rate in parks as areas of permanent pasture or being cut regularly. Many areas also have prehistoric remains.

Management:

Where possible, parkland landscapes including their many complex elements and associated archaeological features should be preserved. Many local planning authorities will have policies for the preservation and management of Registered Parks and Gardens. Cases may be made for restoration of parkland in areas that have degraded. Any development should be carefully designed to complement the park and garden and not to harm above or below ground features.

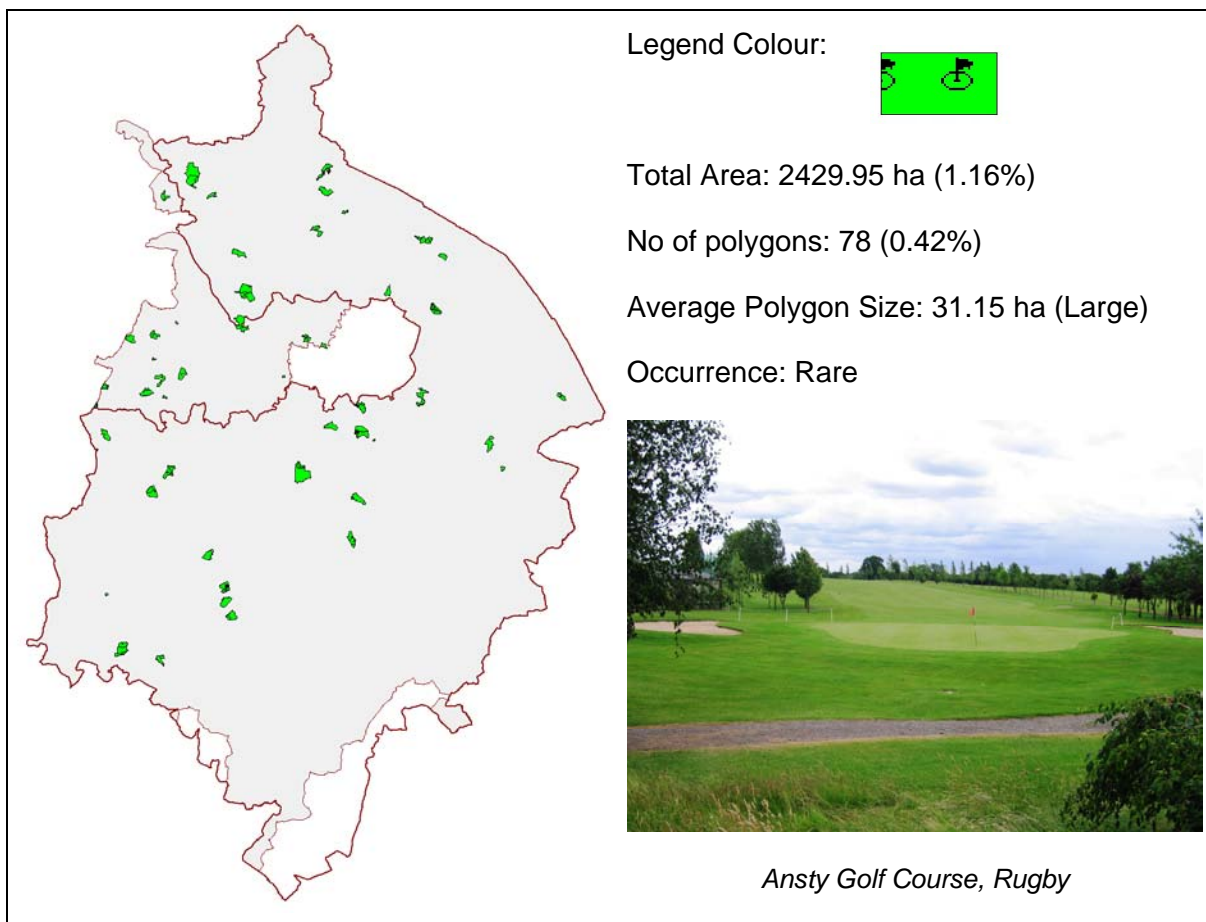
Research:

Extensive work has already been carried out by Jonathan Lovie into Parks and Gardens of Historic Interest in Warwickshire (Lovie, 1997). However the recommendations from his report were only in respect of additional areas to be included in the national register. His report along with the national register and other work has revealed a great detail about these parks and gardens and their complex histories but in many cases the origins and phases of development are less clear. Although some work has been carried out at a national level by the Parks and Gardens UK project (Parks and Gardens Data Services Limited, 2010), there is still no county overview of these designed landscapes period by period.



Compton Verney

Golf Course (57)



Definition:

Areas identified as golf courses from Ordnance Survey mapping.

Sub-types:

Golf Course

Description:

78 Golf Courses are found scattered throughout Warwickshire. These are mainly found in the north and west of the county with some concentrations around Solihull. The distribution forms a line stretching north east from Stratford, between Leamington and Coventry and a number in North Warwickshire district. Most of these golf courses date in origin to between 1900 and 1955. Two are marked on the OS 1st edition making them over 100 years old. A few golf courses are more recent creations or have expanded more recently. The Golf Courses Type is generally large and often contains remnants of previous landscapes. A

surprising number are found in areas that once formed designed parks, while others have ridge and furrow remains or farmhouses within the grounds often converted to clubhouses.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (97%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (16%)

Reason for change (1880-2001):

Golf courses developed rapidly as the sport became more popular at the beginning of the 20th century. This popularity has continued to increase in the later 20th century although at a slower pace.

Factors influencing further change:

Although golf courses do not appear to have any discernible threats, many are near settlements that may expand into those areas. Some golf courses in Solihull have become a focus with settlement created around them and the courses themselves survive. If the golf industry declines then this land could revert back to farmland or be used for other purposes.

Biodiversity Potential:

Medium - Golf courses often contain a variety of landscape types including woodland, hedges and water features as a result there is often a variety of species present.

Archaeological Potential:

Medium - Generally this will depend on the previous land use but often golf courses are formed in the grounds of historic parks or contain other historic features. The initial design and landscaping of a golf course can have a detrimental effect on archaeology but large areas can remain untouched and generally from then

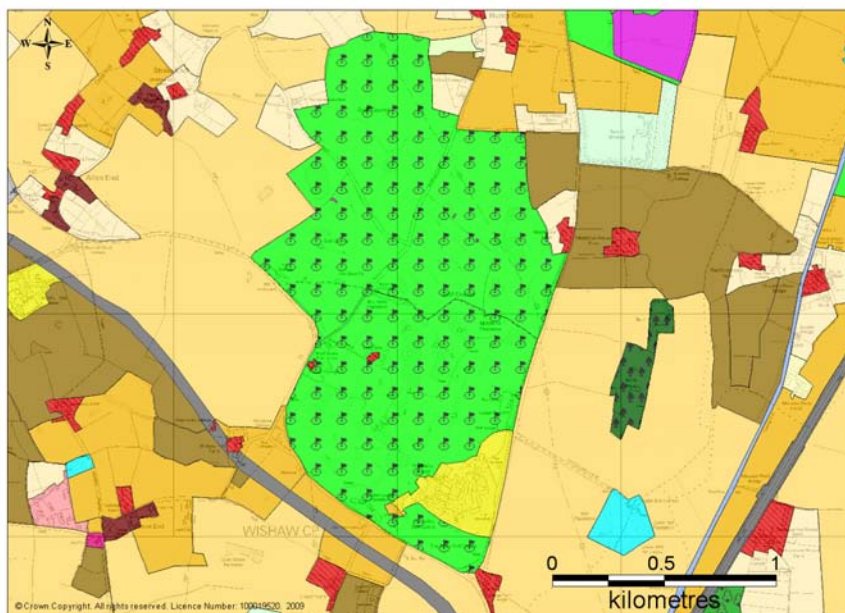
onwards will have minimal impact, although golf courses can sometimes be reworked and redesigned. These areas often contain ridge and furrow, the remains of medieval settlements or roman sites. Some are on the sites of old RAF Airfields.

Management:

To respect and preserve historic landscape and archaeological features where known. Redesign of golf courses can have an adverse effect on whatever may survive from initial construction and requires planning permission. Refer to guidance from English Heritage for the management of golf courses in Historic Parks and Landscapes (English Heritage, 2007).

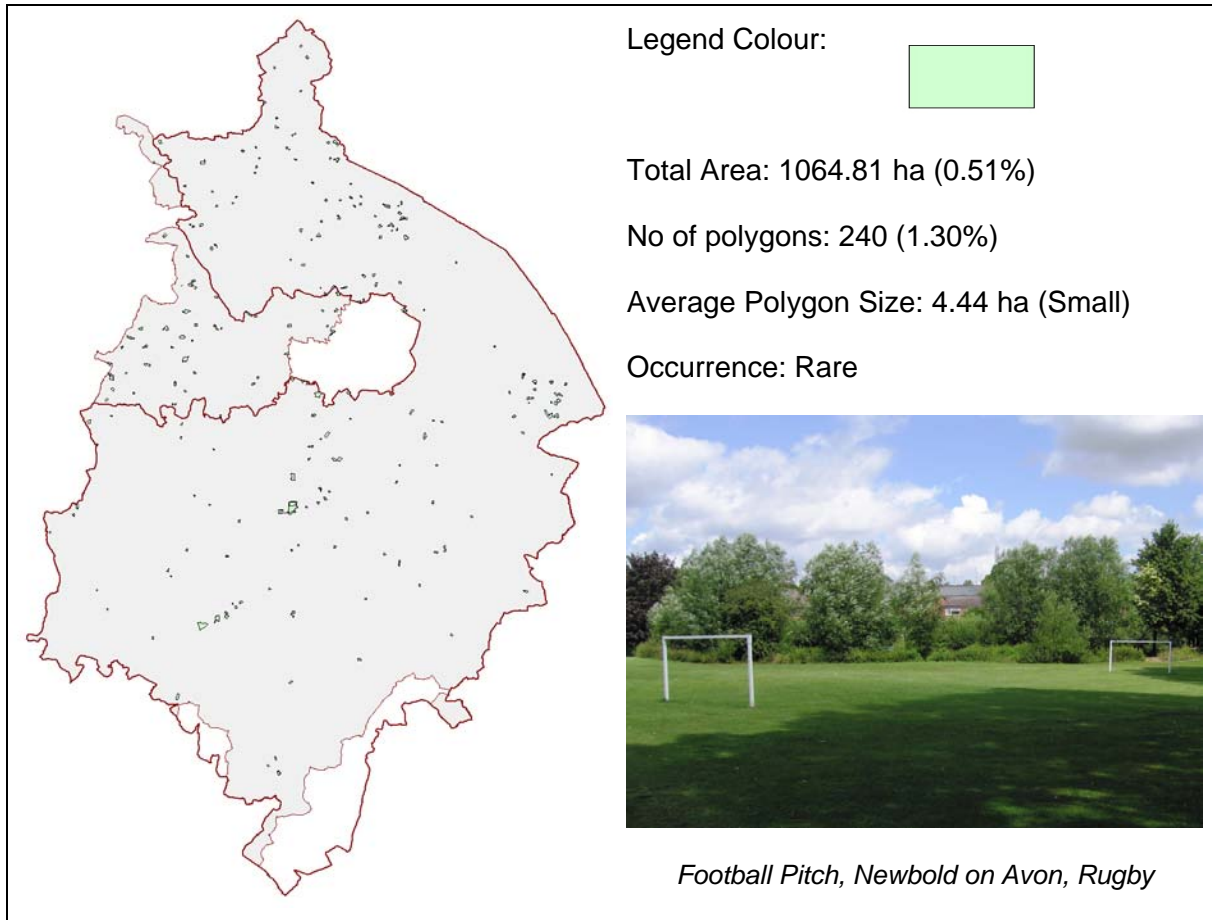
Research:

The amount of research that has taken place regarding golf courses is unknown. An understanding of golf course development in Warwickshire along with golf course design should take place.



The Belfry Golf Course, North Warwickshire

Sports Field (58, 60)



Definition:

Areas identified as sports fields from Ordnance Survey mapping. Areas identified as animal racecourses from Ordnance Survey mapping.

Sub-types:

Sports Field (58)

Areas identified as sports fields from Ordnance Survey mapping.

Racecourse (60)

Areas identified as animal racecourses from Ordnance Survey mapping.

Description:

These form generally small areas in and around main settlements. There are concentrations at Rugby, Nuneaton, Warwick, Stratford and Solihull but many smaller towns and villages also have sports fields. Most date to between 1900 and 1955 but a handful have been marked as sports fields for at least 100 years.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (66%)

Trajectory of Change (1955 – 2001):

Stable (-1%)

Reason for change (1880-2001):

These sites expanded rapidly at the beginning of the 20th century with an increasing population, interest in sport and more critically the increase in 'leisure' time, in the latter part of the 20th century though this expansion has stopped and the amount of sports sites remains stable.

Factors influencing further change:

These sites are often located in or near urban areas and could be threatened by their expansion. Conversely, sports

facilities may be required as infrastructure for new developments.

Biodiversity Potential:

Medium - Most of these areas are intensively managed grassland spaces but some contain a variety of other species such as developed hedgerows, trees and water features.

Archaeological Potential:

Medium - In general these areas have few archaeological sites associated with them but can contain ridge and furrow and may be close to medieval settlement remains.

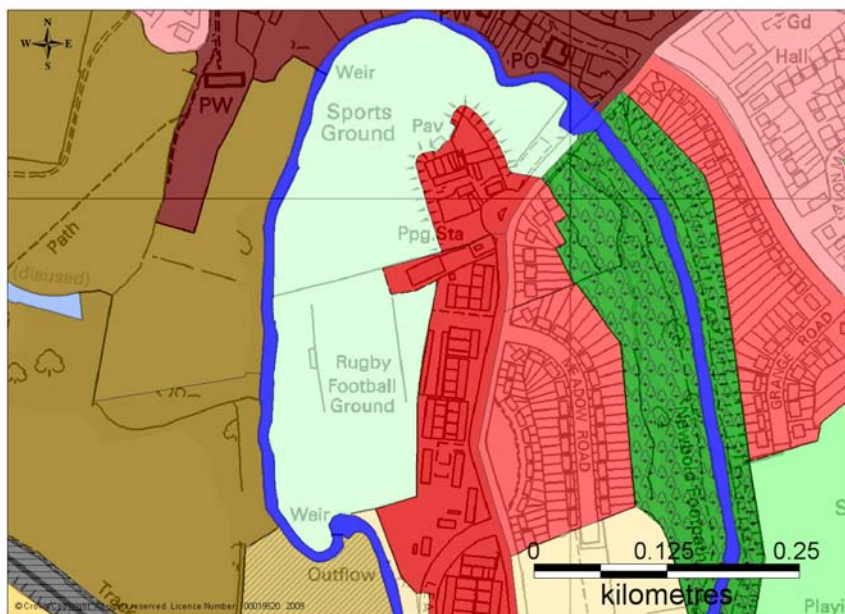
However the ground is often flattened destroying some of the visible archaeological remains.

Management:

Generally, to appropriately manage the site in terms of any known historical or archaeological features.

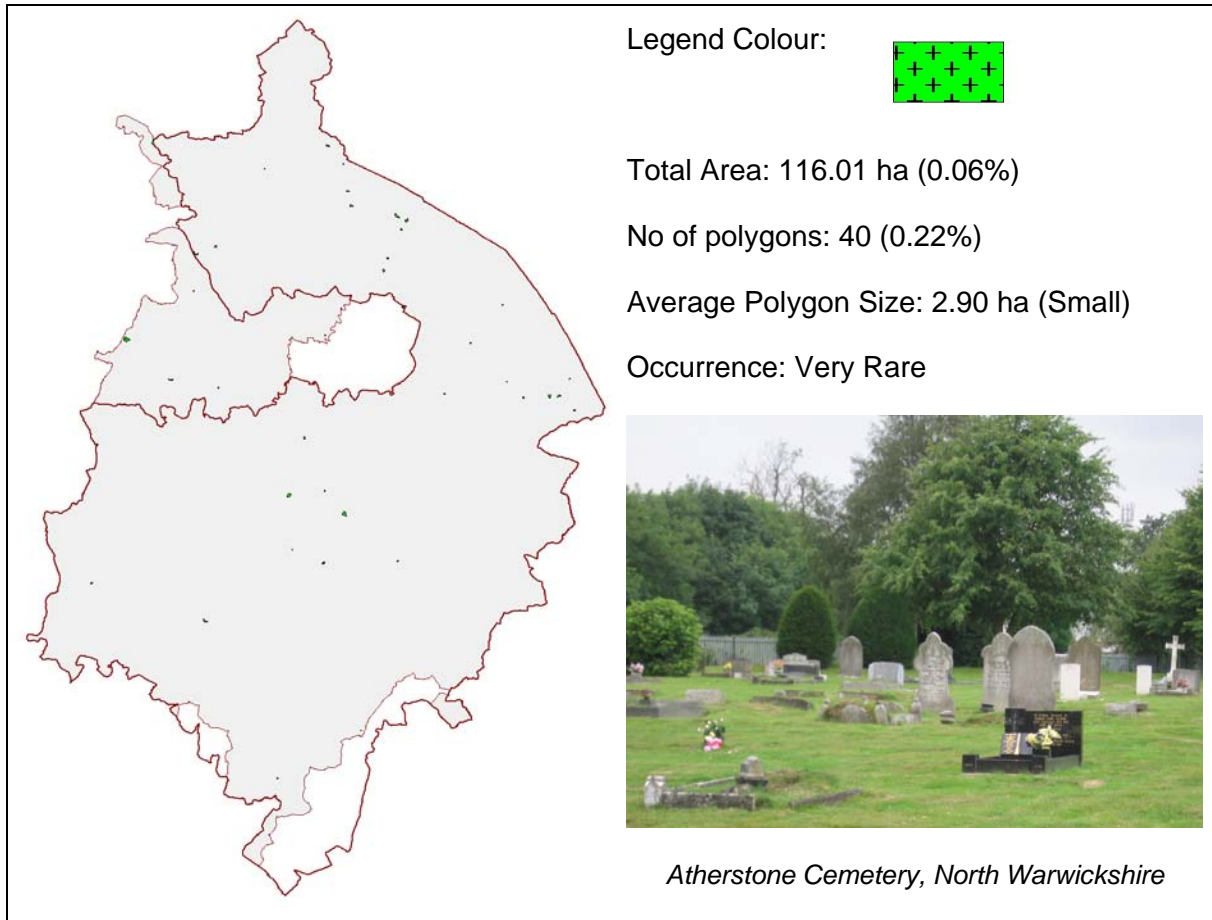
Research:

The origin and development of sports fields in Warwickshire is not well understood. Different types of sports could be mapped and their development explained.



Sports grounds at Newbold-on-Avon, Rugby

Cemeteries (59)



Definition:

Areas identified as cemeteries from Ordnance Survey mapping. These will generally include the larger municipal cemeteries but not smaller church cemeteries.

Sub-types:

Cemeteries

Description:

This type is fairly rare in Warwickshire. They are usually quite small and closely defined areas and found on the edges of the larger settlements in the county. Most have existed for over 100 years and are well established. Some more modern post 1900 cemeteries are associated with settlement expansion such as at Solihull, Rugby and Nuneaton and Bedworth.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (50%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

This type increased with the increasing population and settlements. Most allowed room to expand and have remained relatively stable since, although space is now becoming a serious issue.

Factors influencing further change:

Increasing population producing an increasing demand. Changes in funerary practice.

Biodiversity Potential:

Medium - Although quite intensively maintained these areas usually have a variety of planted species and could form a haven for different forms of wildlife.

Archaeological Potential:

Medium - The cemeteries by their nature contain both above and below ground archaeological remains. However, apart from funerary associated features, the destructive nature of cemeteries mean that few other possible archaeological remains are left intact.

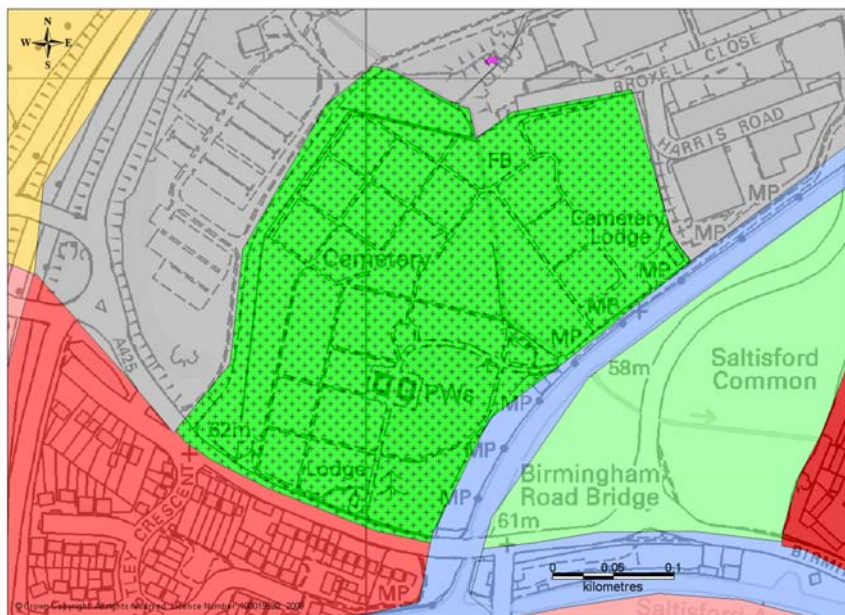
Management:

To maintain and preserve any historic or archaeological features, and to preserve

the character of the cemetery through regular maintenance of grounds and monuments. New monuments should respect the character of those existing, for example, by use of materials comparable with those already present.

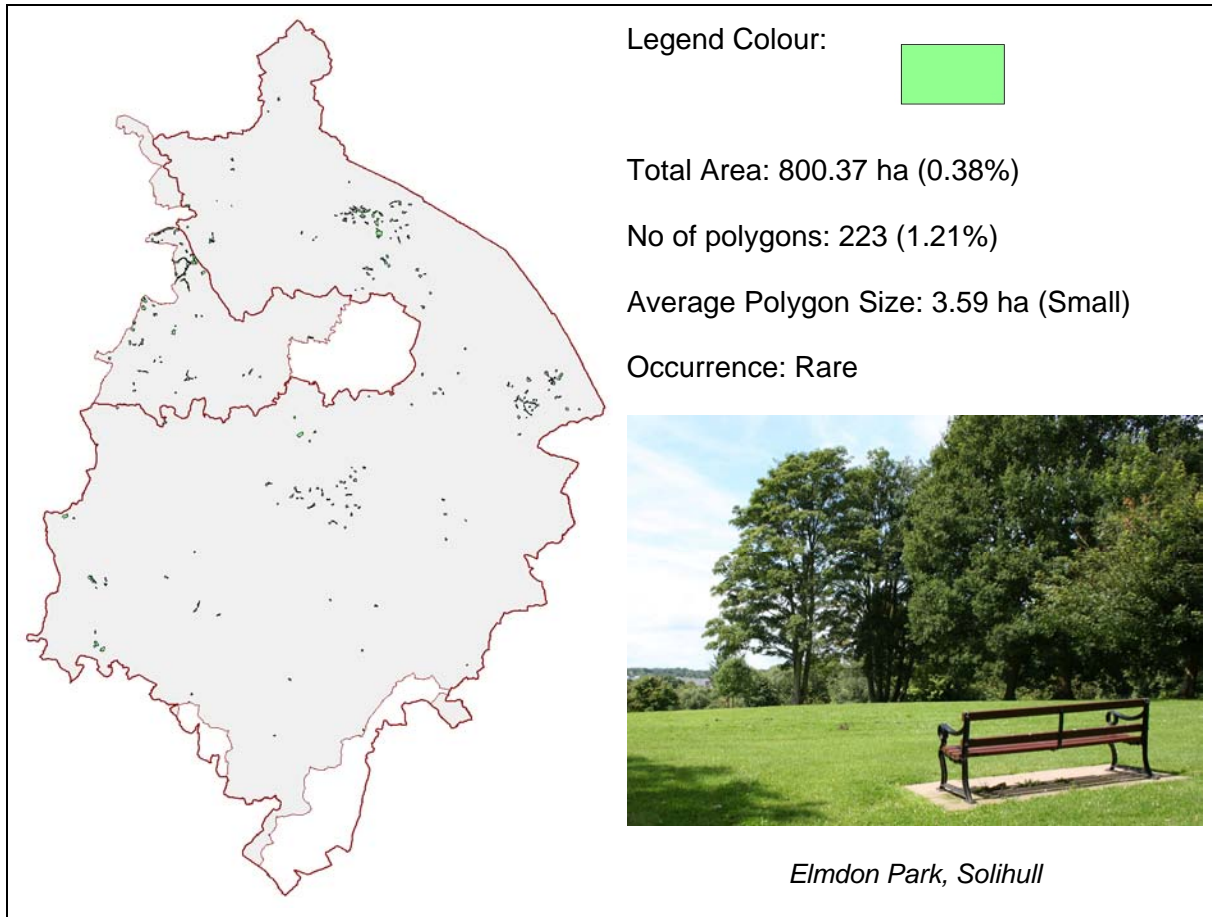
Research:

The history of municipal cemeteries in Warwickshire is not well known.



Warwick Cemetery

Public Open Space (61)



Definition:

Areas of land generally with some degree of landscaping and accessible to the public, usually in an urban context. These will mostly be identifiable from Ordnance Survey mapping and the Warwickshire Habitat Biodiversity Assessment's 'Amenity Grassland' type.

Sub-types:

Public Open Space

Description:

These form small areas and are found in concentrations associated with the larger settlements in Warwickshire such as Warwick, Leamington, Rugby, Nuneaton and Bedworth and the urban areas in Solihull. Most of these date to 1900-1955, although a handful may date slightly earlier and a few have been created after 1955. This type generally appears to be associated with improvements made to urban areas after the Victorian era, when a

greater need for public space and facilities arose with the increasing population. Few of these areas are found in villages or the smaller towns.

Period:

Early - late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (97%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (14%)

Reason for change (1880-2001):

This type appears to have increased with expanding settlements and a desire for more public open space. It continues to expand, albeit at a slower rate.

Factors influencing further change:

Increasing population. Increased demand. Pressure on open land for development.

Biodiversity Potential:

Low-Medium - These areas are generally quite intensively managed and therefore have a low potential for biodiversity.

Archaeological Potential:

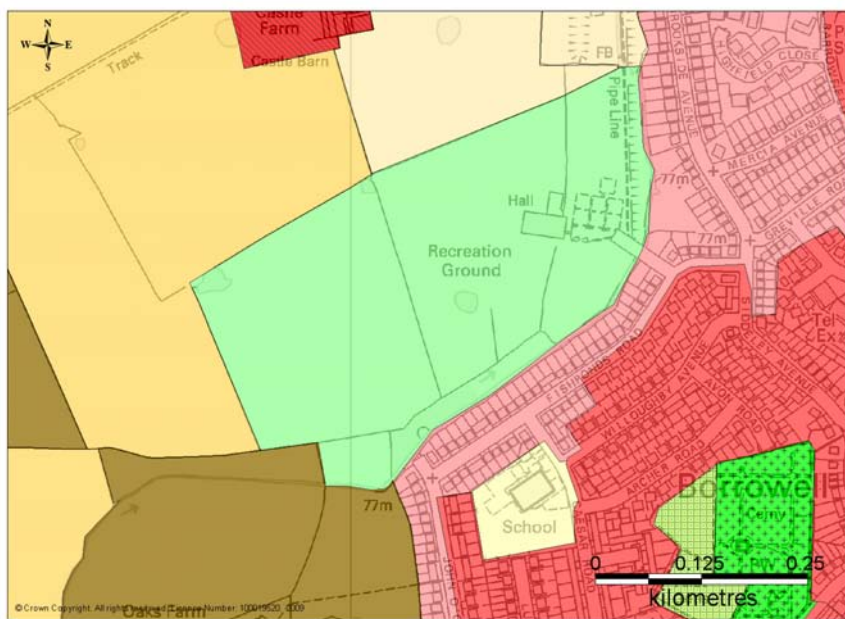
Medium - These areas have a distinct lack of archaeological sites associated with them but the ground in general may be relatively undisturbed. Some medieval settlement and ridge and furrow is found in these areas, along with historic industrial sites.

Management:

Maintain and preserve any historic and archaeological features within the area. Limit ground disturbance where possible. Carry out assessment of archaeological potential when major developments take place and manage as appropriate.

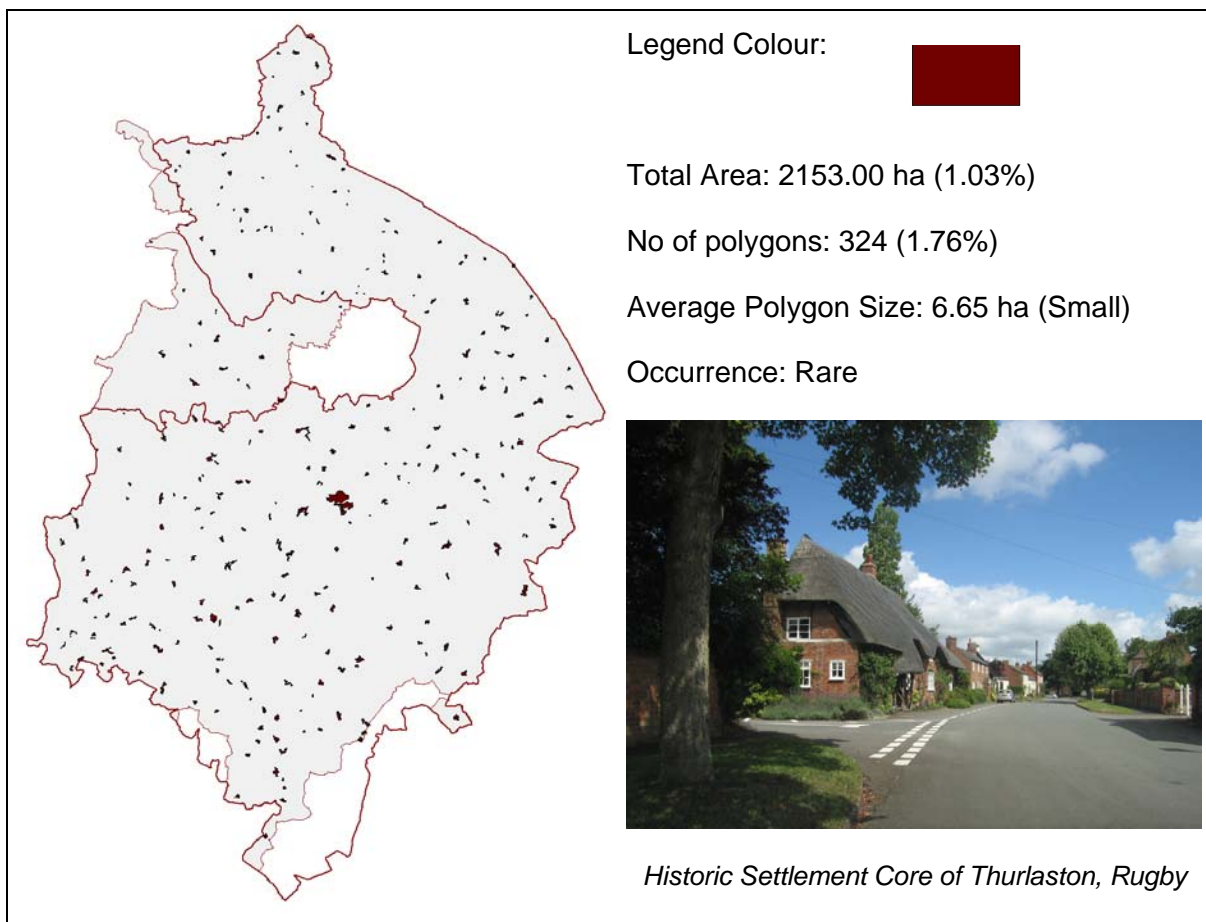
Research:

Research could be carried out on the development of public open space in the last few centuries.



Recreation Ground at Kenilworth

Historic Settlement Core (64)



Definition:

Areas that can be identified as the historic core of a settlement either through morphology or information from the Warwickshire Historic Environment Record. In most cases these will represent the extent of the settlement at the end of the medieval period; however, some historic cores may be later.

Sub-types:

Historic Settlement Core

Description:

There are just over 300 towns and villages where historic cores are identified in Warwickshire. Of these, Leamington Spa is by far the largest and most recent, with many of the others originating in the medieval period. Different patterns exist across Warwickshire. In the south these cores tend to be larger and more numerous; from Solihull northwards, they are smaller and more scattered. They also

form more defined patterns in the county with linear patterns following the River Avon, the Leam, around the edge of Dunsmore, historic routes between Alcester and Warwick, Warwick to Birmingham, on the Fosse between Offchurch and Watling Street and along the main road between Burmington and Stratford. Most historic cores have remained intact since the OS 1st edition; however, some have shrunk and amalgamated through expanding settlement such as parts of Rugby, Hillmorton, Whitnash, Nuneaton and Attleborough. Other historic cores have disappeared completely in areas of greater urban expansion in Solihull (into Shirley, Olton and Kineton Green) and the edge of Coventry (Brownhill Green).

Period:

Medieval-19th century

Trajectory of Change (1880s – 1955):

Declining Slowly (-14%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

Historic cores declined in the first half of the 20th century due to regeneration of town centres and the increase of more commercial centres at the historic core. In the second half of the 20th century this situation has stabilised, in part due to changes in planning policy and a greater focus on preserving, restoring and enhancing historic cores. Most villages have remained generally untouched.

Factors influencing further change:

Increased pressure for building or commercial sites in town centres. Increase of regeneration schemes.

Biodiversity Potential:

Low-medium - Biodiversity is relatively lower in urban areas; however historic cores usually have more associated green spaces, and older more established plants and trees as well as more extensive gardens. Some historic buildings offer great potential for a variety of wildlife.

Archaeological Potential:

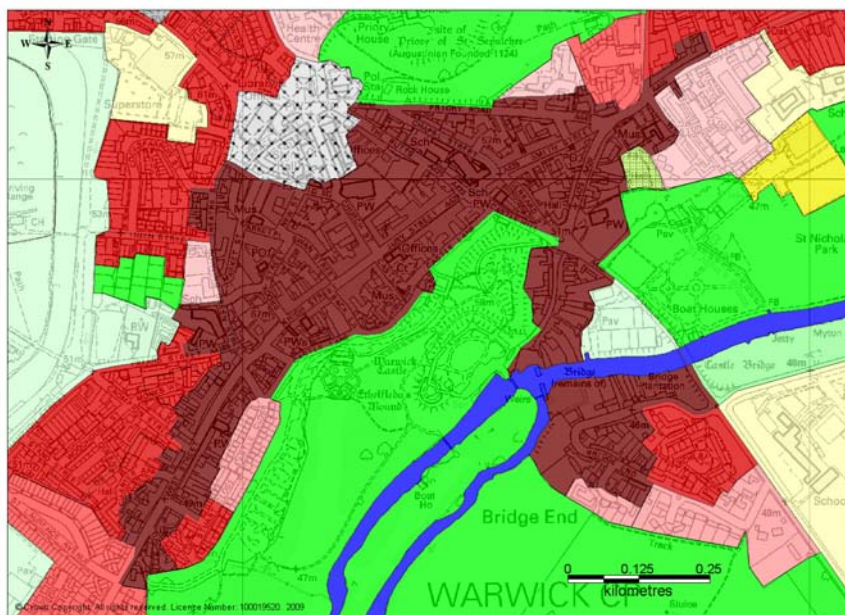
High - These areas by their very definition constitute historic environment assets with historic buildings, structures and archaeological deposits. Their archaeological potential for remains dating to the medieval period or even earlier are high.

Management:

Many of these historic cores form part of conservation areas, frequently with listed buildings and are therefore protected to some extent. However, the potential remains to preserve the historic character of these areas and the archaeological remains that may exist through appropriate policies in Local Development Frameworks.

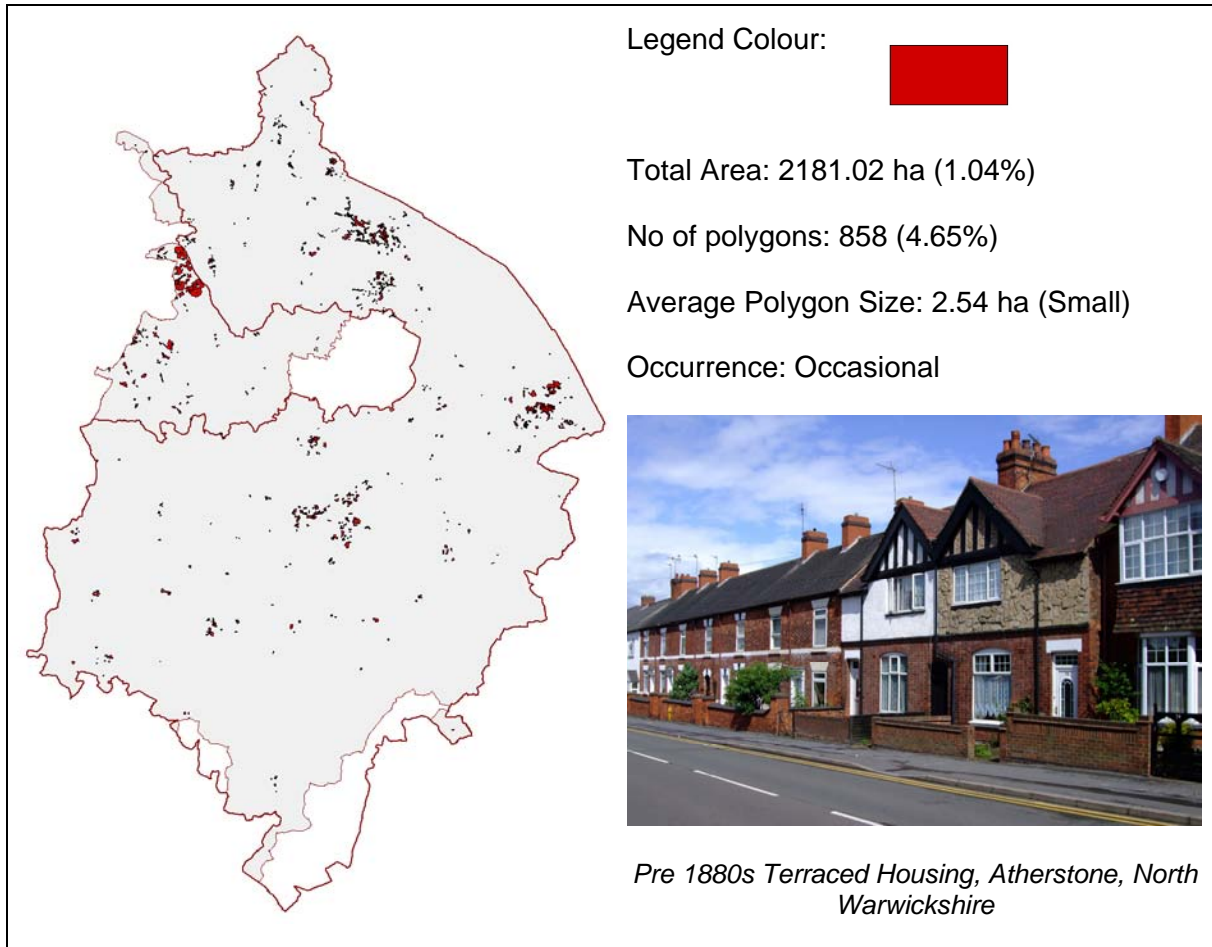
Research:

Extensive Urban Survey is recommended for as many of Warwickshire's historic towns as possible and a bid for funding has been submitted. For the other areas general research agendas exist for historic settlements. In Warwickshire more research could be undertaken into the origins and development of settlement, especially during the Anglo-Saxon and early medieval periods.



Historic Settlement Core of Warwick

Terraced Housing (66, 69, 72, 75)



Definition:

Areas that are marked as being predominantly terraced housing as marked on Ordnance Survey maps.

Sub-types:

Pre 1880s Terraced (66)

Areas that are recognised as predominantly terraced housing as marked on the Ordnance Survey 1st edition mapping. In many cases this area will have already been defined as the historic settlement core, however, in cases where the older (pre 1st edition) historic settlement core has been defined this area will show a later settlement growth.

Post 1880s/Pre 1900s Terraced (69)

Areas of terraced housing marked on the Ordnance Survey 2nd edition mapping but not on the 1st edition.

Post 1900s/Pre 1955 Terraced (72)

Areas of terraced housing marked on the Ordnance Survey 1955 edition mapping but not on the 2nd edition.

Post 1955 Terraced (75)

Areas of terraced housing marked on the modern Ordnance Survey mapping but not on the 1955 edition.

Description:

Terraced housing in Warwickshire is predominantly located within the larger urban areas in the county including Stratford, Warwick, Leamington, Kenilworth, Rugby, Nuneaton, Bedworth and the urban area of Solihull. These areas tend to have terraced housing over 100 years old towards the centre with more leading outwards as the 20th century progressed. There is a scattering in the smaller towns and larger villages such as Southam, Polesworth, Coleshill, Baddesley Ensor, New Arley, Bidford, Alcester and Studley. This terraced

housing tends to be post-war and later 20th century development. There is more terraced housing in the north of the county, which also appears to be older, with a definite relationship to industrial development. There is a distinct lack of terraced housing in the very south and south east of the county.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (412%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

This increased with the population expansion at the beginning of the 20th century and since then has remained relatively stable. This is in terms of overall area of this type of housing. In many cases in the later 20th century redevelopment of housing stock has taken place altering the character of settlement.

Factors influencing further change:

Increased population. Housing market demand. Urban redevelopment.

Biodiversity Potential:

Low - Medium - Although settlement in general does not offer a very high potential for biodiversity, gardens associated with houses do contain a variety of species.

Archaeological Potential:

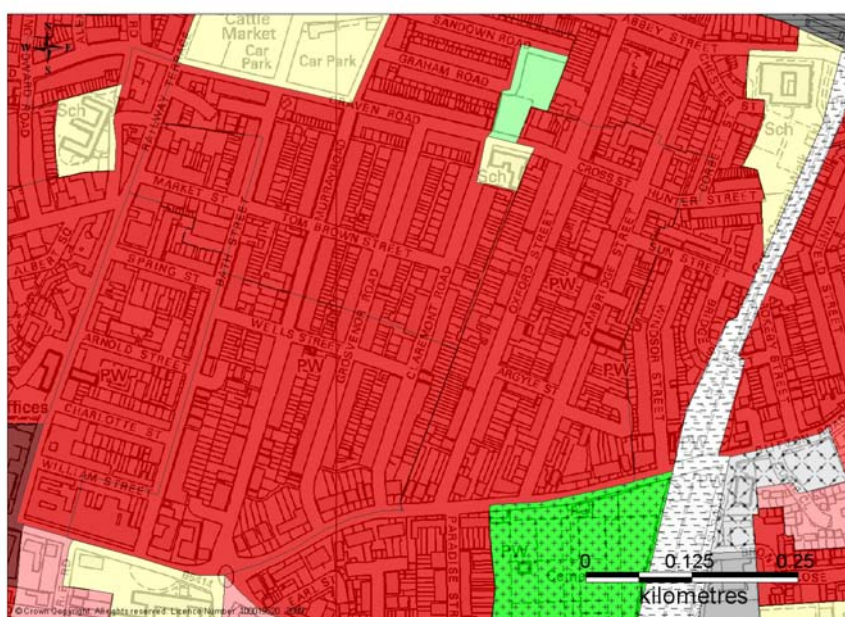
Low-medium - These areas are associated with some medieval settlements, some industrial sites and churches but in general they are quite destructive to the archaeology due to large deep footprints and associated ground disturbance.

Management:

New development should endeavour to take into account the character of the area and ensure that styles and materials are in keeping with the surroundings. Any archaeological potential should be realised prior to major development.

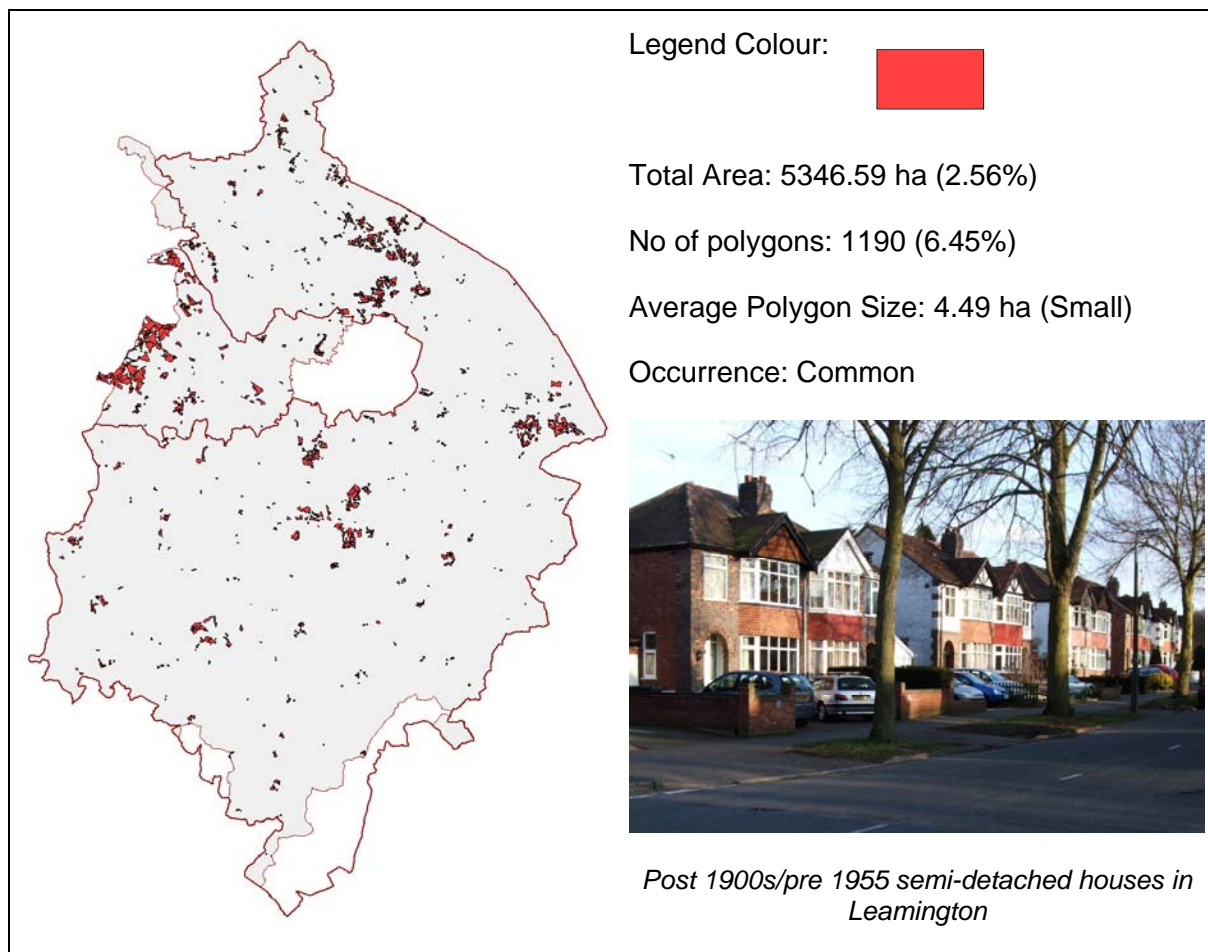
Research:

Extensive Urban Survey is recommended for as many of Warwickshire's historic towns as possible. For other areas and in the case of terraced housing more research could be carried out into the development of groups of housing in certain areas and the exact development of urban areas for this type.



Terraced Housing at Rugby

Semi-detached Housing (67, 70, 73, 76)



Definition:

Areas that are marked as being predominantly semi-detached housing on Ordnance Survey maps.

Sub-types:

Pre 1880s Semi-Detached (67)

Areas that are recognised as predominantly semi-detached housing as marked on the Ordnance Survey 1st edition mapping. In many cases this area will have already been defined as the historic settlement core, however, in cases where the older (pre 1st edition) historic settlement core has been defined then this area will show a later settlement growth.

Post 1880s/Pre 1900s Semi-Detached (70)

Areas of Semi-detached housing marked on the Ordnance Survey 2nd edition mapping but not on the 1st edition.

Post 1900s/Pre 1955 Semi-Detached (73)

Areas of Semi-detached housing marked on the Ordnance Survey 1955 edition mapping but not on the 2nd edition.

Post 1955 Semi-Detached (76)

Areas of Semi-detached housing marked on the modern Ordnance Survey mapping but not on the 1955 edition.

Description:

This is one of the most common settlement types in the county, second only to detached housing. It is found predominantly in the main urban areas of Warwickshire (Stratford, Warwick, Leamington, Kenilworth, Rugby, Nuneaton, Bedworth and the urban area of Solihull). There is however a wide scattering of semi-detached houses throughout Warwickshire within many of the villages, much more so than terraced housing. Most of the semi-detached housing is created after 1900 with only a few small areas of early semi-detached

houses close to the historic cores. It tends to be towards the edges of the larger settlements with by far the greatest area in the urban part of Solihull, especially in Elmdon, Shirley, Lyndon, Castle Bromwich and Solihull.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (5308%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

This increased with the population expansion at the beginning of the 20th century and since then has remained relatively stable. This is in terms of overall area of this type of housing. In many cases in the later 20th century redevelopment of housing stock has taken place altering the character of settlement.

Factors influencing further change:

Increased population. Housing market demand. Urban redevelopment.

Biodiversity Potential:

Low - Medium - Although settlement in general does not offer a very high potential for biodiversity, gardens associated with houses do contain a variety of species.

Archaeological Potential:

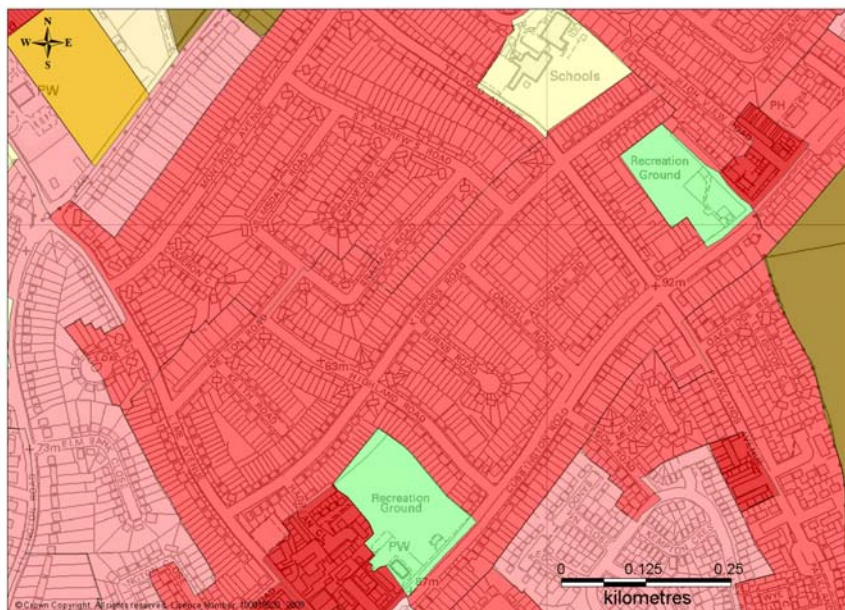
Low-medium. These areas are associated with some medieval settlements and some industrial sites. However, in general, like all types of urban housing archaeological deposits are often heavily disturbed.

Management:

New development should endeavour to take into account the character of the area and ensure that styles and materials are in keeping with the surroundings. Any archaeological potential should be realised prior to major development.

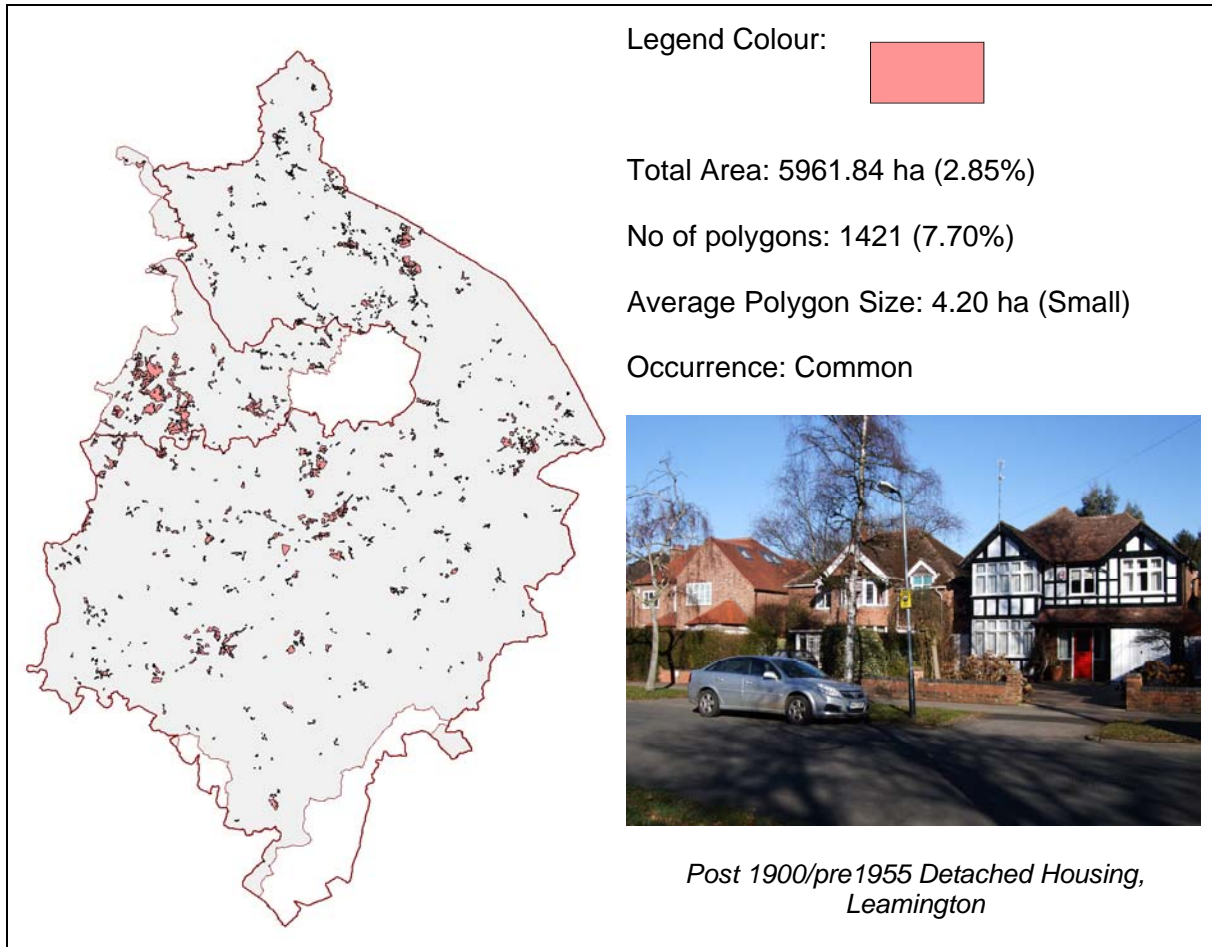
Research:

Extensive Urban Survey is recommended for as many of Warwickshire's historic towns as possible. For other areas and in the case of semi-detached housing more research could be carried out into the development of groups of housing in certain areas and the exact development of urban areas for this type.



Semi-detached Housing in Leamington

Detached Housing (68, 71, 74, 77)



Definition:

Areas that are marked as being predominantly detached housing on Ordnance Survey maps.

Sub-types:

Pre 1880s Detached (68)

Areas that are recognised as predominantly Detached housing as marked on the Ordnance Survey 1st edition mapping. In many cases this area will have already been defined as the historic settlement core, however, in cases where the older (pre 1st edition) historic settlement core has been defined then this area will show a later settlement growth.

Post 1880s/Pre 1900s Detached (71)

Areas of Detached housing marked on the Ordnance Survey 2nd edition mapping but not on the 1st edition.

Post 1900s/Pre 1955 Detached (74)

Areas of Detached housing marked on the Ordnance Survey 1955 edition mapping but not on the 2nd edition.

Post 1955 Detached (77)

Areas of Detached housing marked on the modern Ordnance Survey mapping but not on the 1955 edition.

Description:

This is the most common settlement type in Warwickshire, making up around 30% of settlement. Detached housing is found scattered throughout the county with most concentrations occurring in urban areas, but a large number of detached houses are found in villages and in the countryside, in contrast to terraced and semi-detached housing. Most of the detached housing is created after 1955, with a few examples of pre 1880s and 1880-1955 detached housing, remaining. Some areas of the county have seen the older detached housing replaced with later

semi-detached housing or flats/apartments. Most of this appears to occur in the Solihull Metropolitan Borough urban area probably as a result of urban regeneration or settlement growth.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (1161%)

Trajectory of Change (1955 – 2001):

Stable (1%)

Reason for change (1880-2001):

This increased with the population expansion at the beginning of the 20th century and since then has remained relatively stable. This is in terms of overall area of this type of housing. In many cases in the later 20th century redevelopment of housing stock has taken place altering the character of settlement.

Factors influencing further change:

Increased population. Housing market demand. Urban redevelopment.

Biodiversity Potential:

Low - Medium - Although settlement in general does not offer a very high potential

for biodiversity, gardens associated with houses often contain a variety of species.

Archaeological Potential:

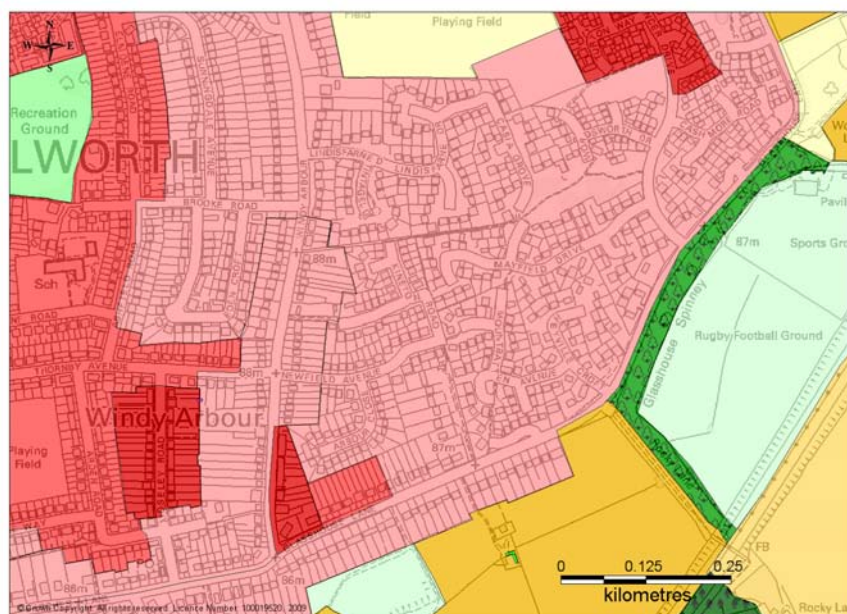
Medium - These areas may be associated with ridge and furrow, deserted medieval settlements and a few historic buildings. Although building construction itself can disturb the ground quite heavily this type is often associated with larger gardens and could have more potential for archaeology. In general these areas are quite difficult to assess and probably should be done on a case by case basis.

Management:

New development should endeavour to take into account the character of the area and ensure that styles and materials are in keeping with the surroundings. Any archaeological potential should be realised prior to major development.

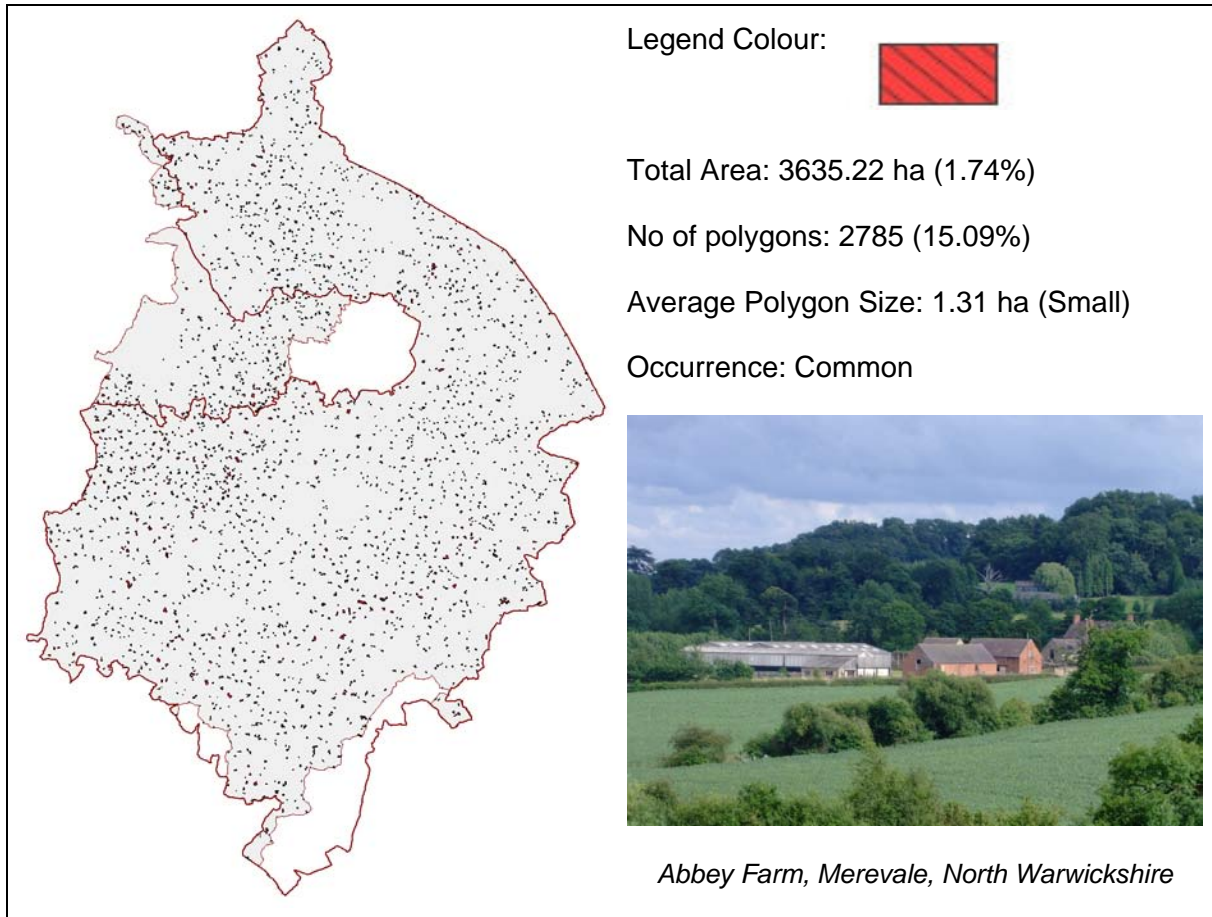
Research:

Extensive Urban Survey is recommended for as many of Warwickshire's historic towns as possible. For other areas and in the case of detached housing more research could be carried out into the development of groups of housing in certain areas and the exact development of urban areas for this type.



Detached Housing at Kenilworth

Farmsteads (78, 79, 80, 81)



Definition:

Areas covered by farmhouses and their associated buildings marked on Ordnance Survey maps. These are usually also marked with a farm name.

Sub-types:

Farm Complex pre 1880s (78)

Areas covered by farmhouses and associated buildings marked on the Ordnance Survey 1st edition mapping. These are usually also marked with a farm name.

Farm Complex Post 1880s/Pre 1900s (79)

Areas covered by farmhouses and associated buildings marked on the Ordnance Survey 2nd edition mapping but not on the 1st edition. These are usually also marked with a farm name.

Farm Complex Post 1900s/Pre 1955 (80)

Areas covered by farmhouses and associated buildings marked on the

Ordnance Survey 1955 edition mapping but not on the 2nd edition. These are usually also marked with a farm name.

Farm Complex Post 1955 (81)

Areas covered by farmhouses and associated buildings marked on the Ordnance Survey modern mapping but not on the 1955 edition. These are usually also marked with a farm name.

Description:

This type is the most numerous in terms of the number of polygons recorded. This is probably because each farmstead is recorded on an individual basis. Most of the farmsteads recorded date to pre 1880s, with the next substantial group dating to after 1955; between these dates few new farms appear in Warwickshire. There are concentrations of farmsteads in the county, with more found in north Stratford and west Warwick district, Solihull and southern North Warwickshire district. This happens to be the same area

that has better survival of piecemeal enclosure and squatter/encroachment enclosure and where most of the common/heath once existed. There is another broad concentration running south east from Rugby in a wide strip covering most of the Feldon. The Avon valley appears to have less of a concentration of farmsteads but part of this is due to the larger urban areas in the Avon Valley. There are other discrete patterns of farmsteads forming lines, but it is unclear whether these patterns of farms signify anything or not. One line from Bedworth Heath running northeast towards Ansley and beyond is directly related to the road but other alignments of farms are not so clear. More post 1955 farms are found to the east of Coventry and Nuneaton and Bedworth. There are fewer in the west of the county.

Period:

Medieval -20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-21%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (28%)

Reason for change (1880-2001):

The decline in the first half of the century is probably due largely to settlement expansion, often absorbing farmsteads and the villages they were in. The decline of the agricultural industry may be another factor. After World War Two the farming industry rose once again as more intensive methods of farming were introduced, and a number of farmsteads then grew at a steady pace. In the last part of the 20th century this trend appears to be reversing with the concentration and amalgamation of land holdings and with farmsteads once again in decline.

Factors influencing further change:

Any changes in the agricultural industry will affect farmsteads. Presently many farms and farm buildings are converted for other uses as agriculture goes into decline and becomes less profitable. Agri-environment schemes can have a positive effect, offering management plans for

farms and farm buildings. Farms continue to be amalgamated and as a result farmsteads either become defunct or change their use.

Biodiversity Potential:

Medium - Although farmsteads are made up predominantly of buildings these buildings often allow a variety of important wildlife to thrive such as bats, owls, bird etc. Ponds and other features may also exist.

Archaeological Potential:

Medium-high - Farmsteads by their nature are often of historic value and many are listed. The areas of the main farm buildings and courtyards are often associated with previous historic and archaeological features such as manor houses, medieval or post-medieval settlements, possibly even earlier settlements. In the north and west of the county they are often associated with moated settlements. Farms are inextricably linked to the great parks and designed landscapes of the 18th and 19th centuries with home farms supplying the needs of rural estates.

Management:

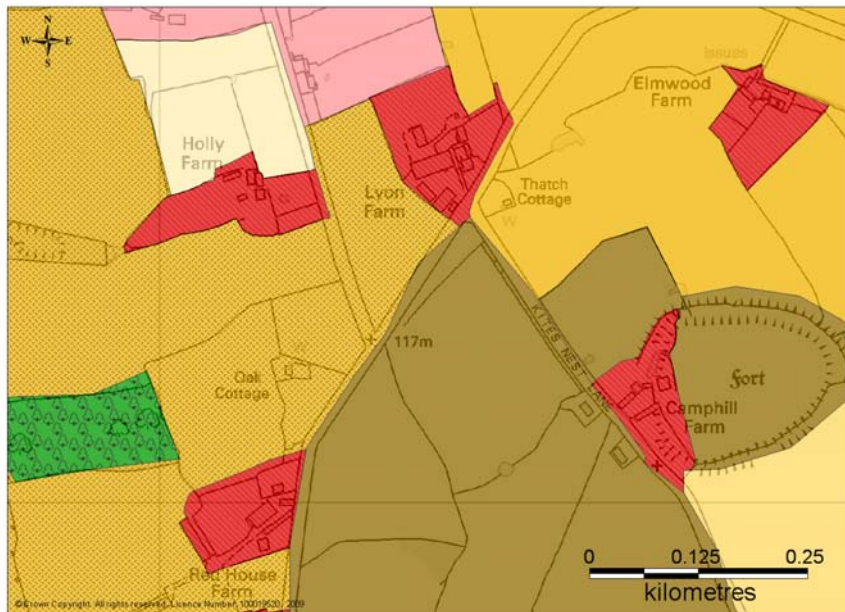
Management recommendations will arise from the West Midlands Historic Farmstead Characterisation project. Aside from these, unique buildings and farmsteads should be maintained and preserved where possible. Development should take into account the character of the farmstead, its layout and its buildings. The link should be made between the farmstead and the land it relates to. Agri-environment schemes offer management opportunities for farms and farm buildings.

Research:

The West Midlands Historic Farmstead Characterisation Project which will further our understanding of farmstead plan, layout and type, and place it into its context in the historic landscape, is due to take place in 2009 and 2010 and this will add much to our understanding of historic farmsteads, not just in Warwickshire but on a regional level. It is hoped in the future to be able to compare farmstead character

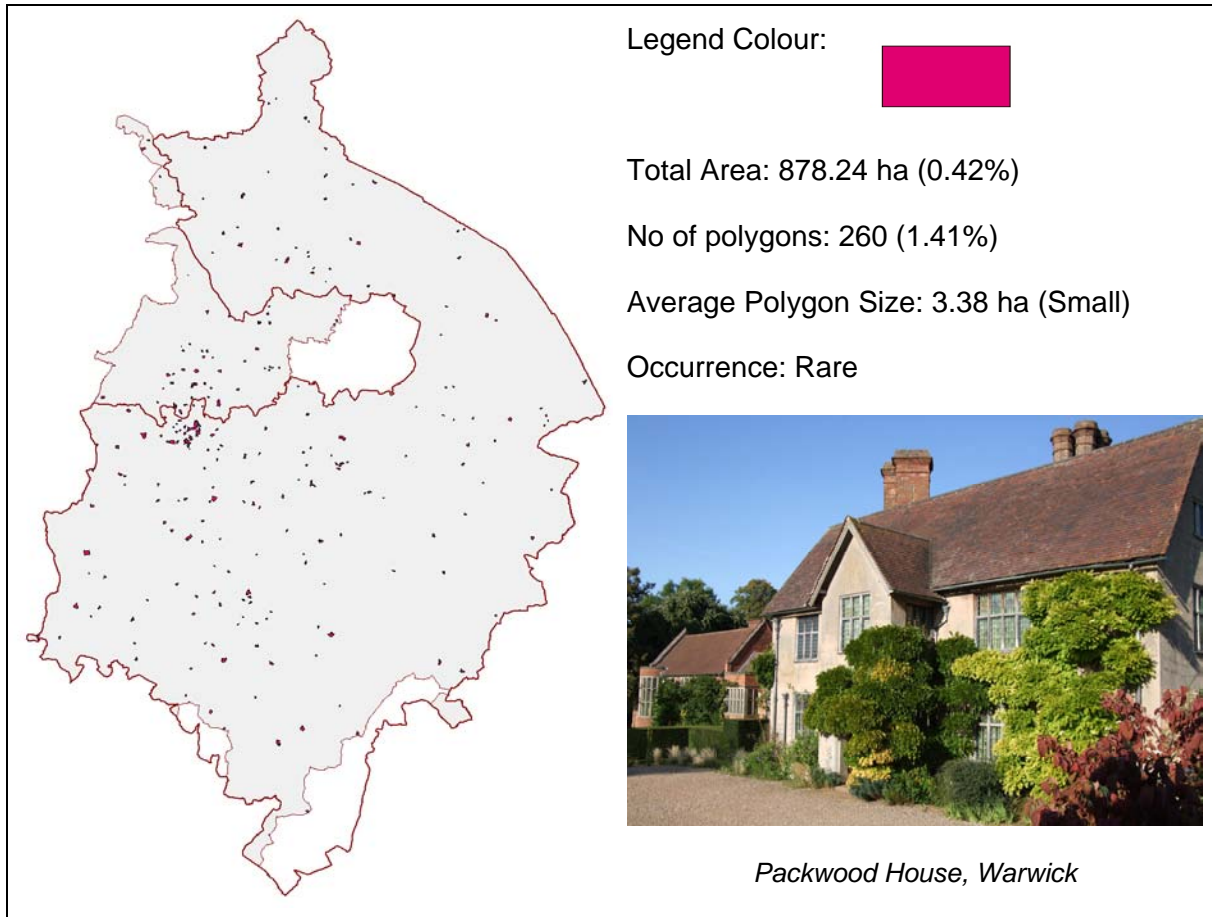
on a national level. Aside from this project one area of farmsteads that could be better understood is post-1955 development of farmsteads. Also to

identify the landholding relating to each farmstead and analyse this data.



A cluster of farms at Beausale, Warwick

Country House (82)



Definition:

Areas of usually isolated settlement in a rural or semi-rural setting often associated with parkland or designed landscapes. In many cases in Warwickshire these will be named 'Hall' and of 18th and 19th century date in origin.

Sub-types:

Country House

Description:

Country houses are fairly prominent in Warwickshire with a large concentration in south east Solihull metropolitan borough and northwest Warwick district. There is also a strong concentration of country houses in the more affluent districts of Warwick and Stratford in the south of Warwickshire with far fewer in the east and north of the county. The development over the 20th century of country houses is also distinctive with more, and larger, country houses existing at the end of the

19th century and with a much more even spread throughout the county, although there is still a concentration of country houses in the south and eastern part of Solihull and the north western part of Warwick district and also in areas around Warwick, Kenilworth and Leamington. In the first half of the 20th century the number and size of country houses declined rapidly by 75-90%. Many of these were converted into other uses more suitable to their size such as hotels, schools and training colleges. Since the 1950s the number of country houses has increased but their size has continued to reduce.

Period:

Post medieval- late 20th century (although some have remains of medieval settlement)

Trajectory of Change (1880s – 1955):

Declining Rapidly (-47%)

Trajectory of Change (1955 – 2001):

Declining Slowly (-7%)

Reason for change (1880-2001):

Country houses declined at the beginning of the 20th century as a result of changing socio-economic factors in England at the time making it difficult to maintain large expensive country houses and estates. This is likely to be related to impacts of the two world wars. During the later 20th century this decline has slowed and smaller country houses have started to be created.

Factors influencing further change:

Increase in population. Increase in wealthy classes. Housing market demand.

Biodiversity Potential:

Medium - High - These houses are often older historic houses with large associated gardens containing a variety of species.

Archaeological Potential:

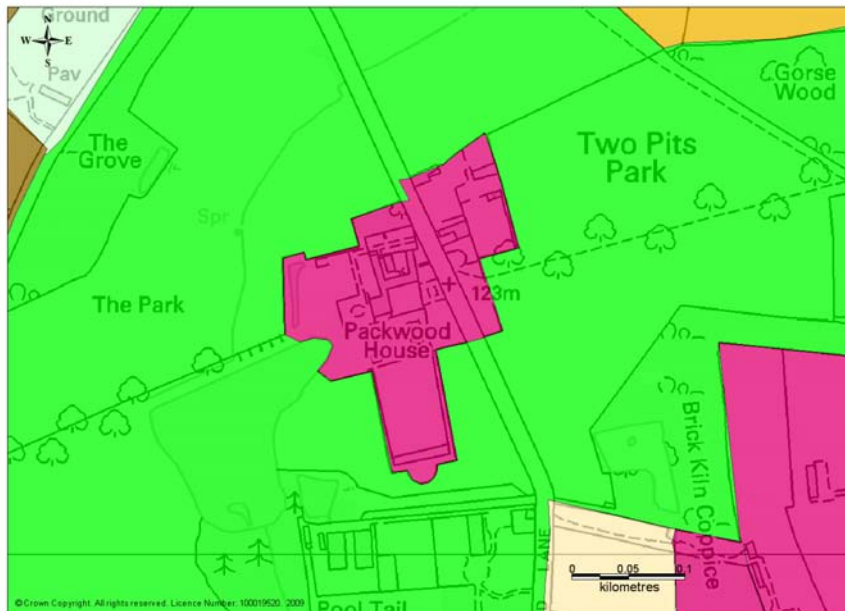
Medium - High - Many country houses by their nature are historic buildings and their immediate gardens and grounds often contain other historic features. They are often associated with designed parks and gardens, deer parks, sometimes moated settlements, farmsteads and deserted medieval settlements.

Management:

Some of these buildings are protected as listed buildings. However, any historic or archaeological features associated with the house or immediate grounds should be maintained and preserved by limiting development which disturbs known features.

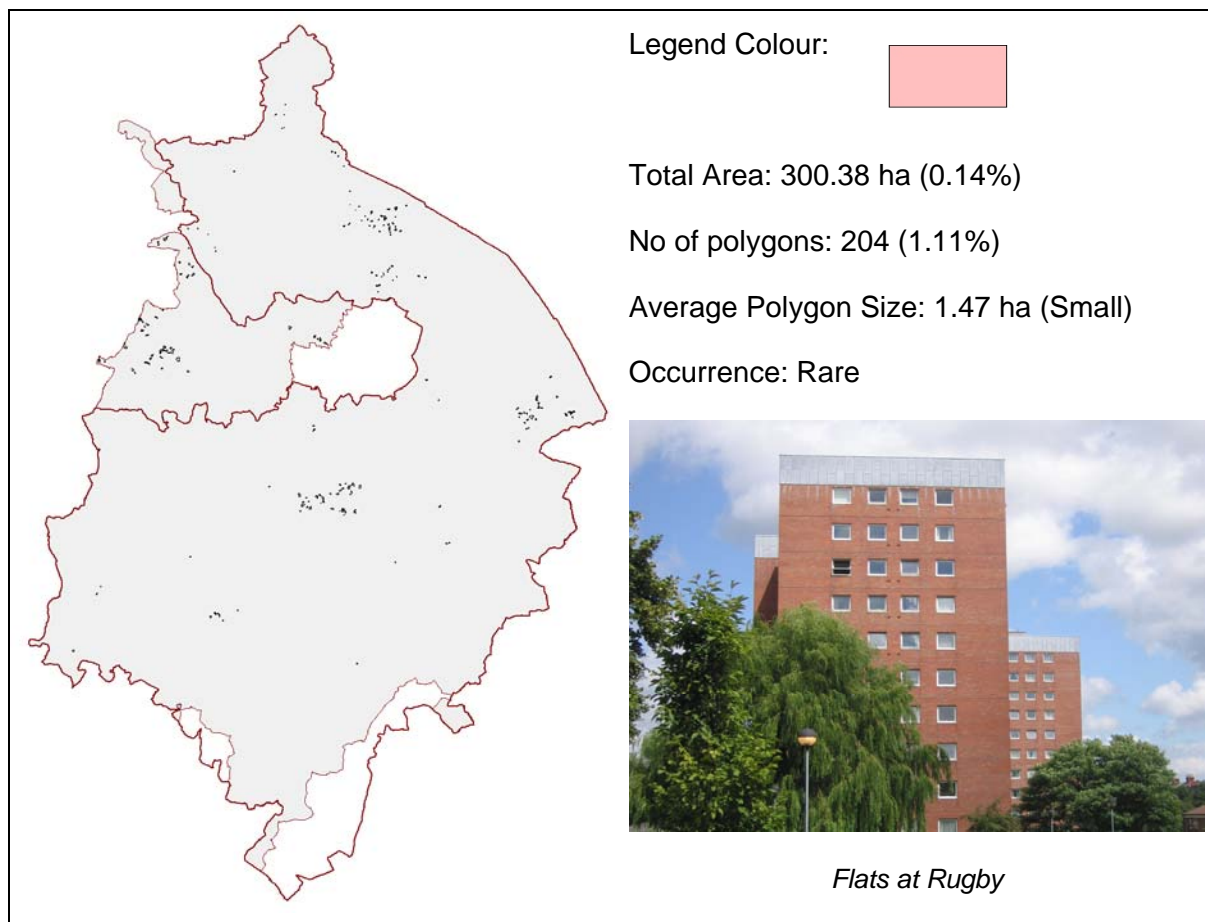
Research:

Substantial research has been carried out regarding historic country houses, halls, manor houses and estates (Tyack, 1994). However more recent 20th century country houses have not received as much attention.



Packwood House, Warwick

Flats and Apartments (83)



Definition:

Areas marked as multi-storey residential buildings.

Sub-types:

Flats and Apartments

Description:

This type of housing is a phenomenon seen after World War Two and is almost exclusively found in the main urban areas around the county such as Warwick, Leamington, Rugby, Nuneaton, Bedworth, Stratford and the urban areas of Solihull. A few exceptions are country houses which have been converted into apartments, a trend that is continuing.

Period:

20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

In the first half of the 20th century this type saw a rapid increase mainly due to flats being seen as a housing solution in urban areas to provide cheap affordable accommodation for after the Second World War. In the later part of the 20th century this stabilised and in Warwickshire few new areas of flats or apartments exist; most are conversions of older farms or country houses.

Factors influencing further change:

Increased population. Housing market demand. Urban redevelopment.

Biodiversity Potential:

Low - The nature of this type offer a low potential for biodiversity.

Archaeological Potential:

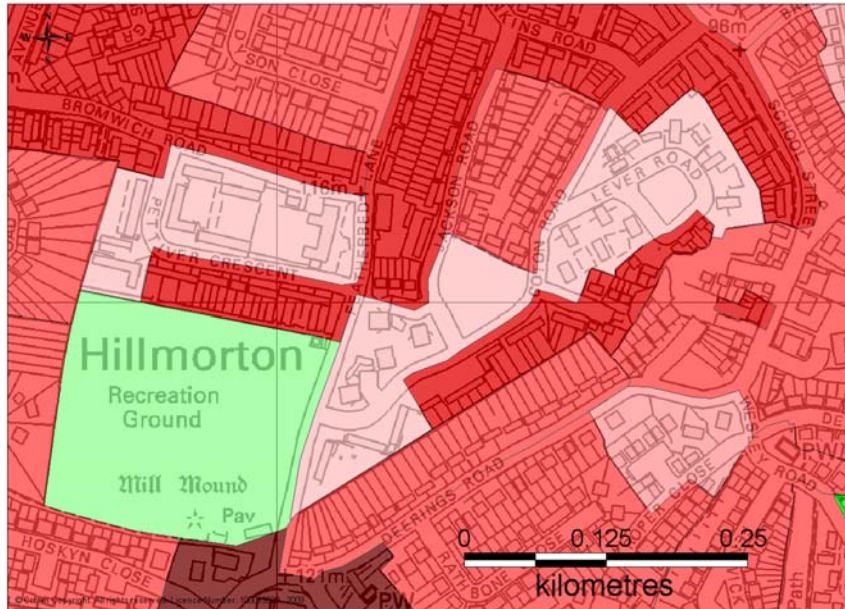
Low - This type is highly destructive to archaeology due to the large foundations and often intensive use of land; however, they can often be found close to or even within historic cores of settlements and some medieval settlement remains.

Management:

To preserve any archaeological remains where possible.

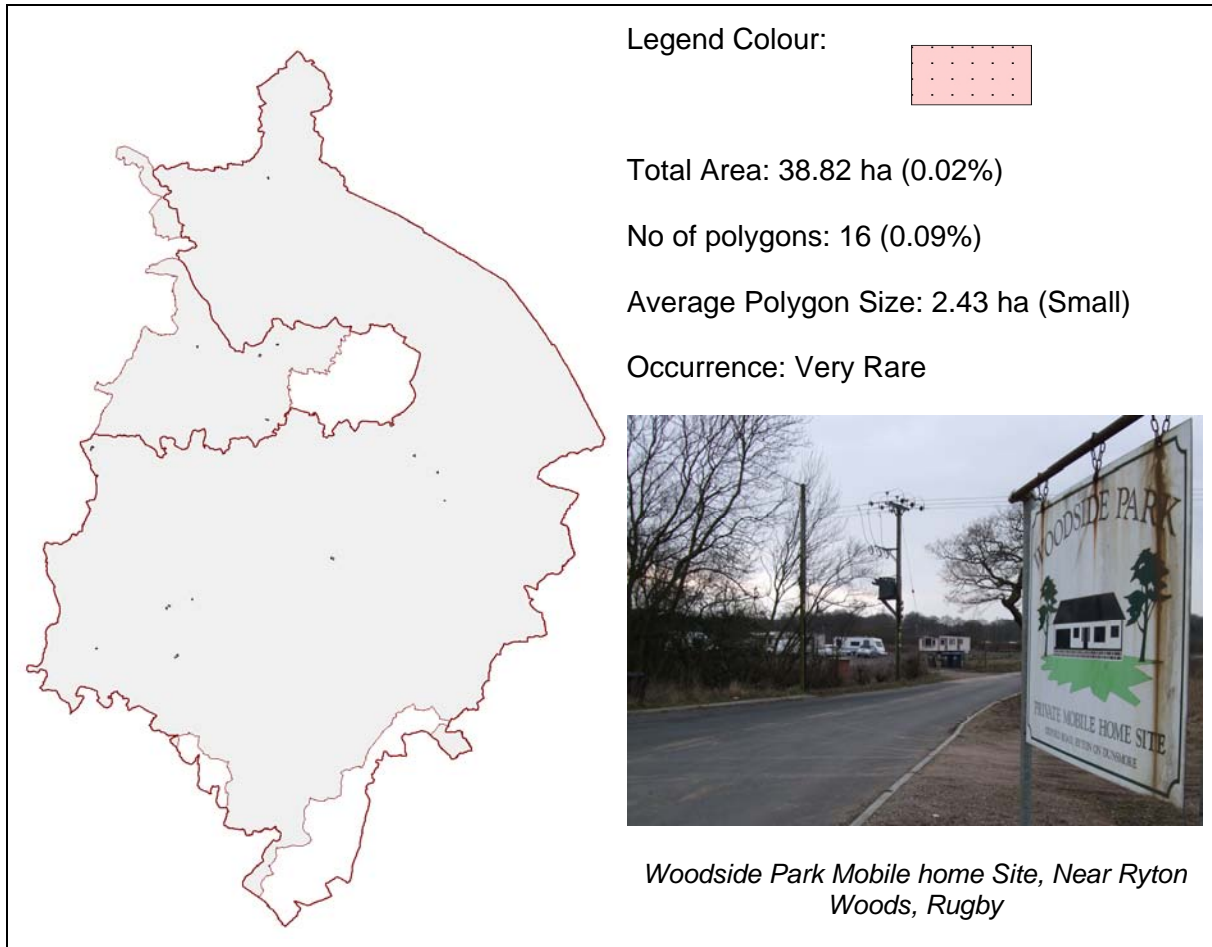
Research:

n/a



Flats at Hillmorton, Rugby

Mobile Home Park (120)



Definition:

Areas where 'temporary' mobile homes exist. These are usually associated with gypsy/traveller sites or retirement parks.

Sub-types:

Mobile Home Park

Description:

Only 16 sites of mobile homes exist in Warwickshire and these are spread throughout the county. Curiously half of these sites are found adjacent to or within woodland, the reason for this is not clear.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Stable (0%)

Reason for change (1880-2001):

This type is a phenomenon that happens after World War Two.

Factors influencing further change:

Increased demand, increasing population, temporary status and the expectation that local authorities will identify sites for gypsies and travellers.

Biodiversity Potential:

Low - The nature of this type offer a low potential for biodiversity.

Archaeological Potential:

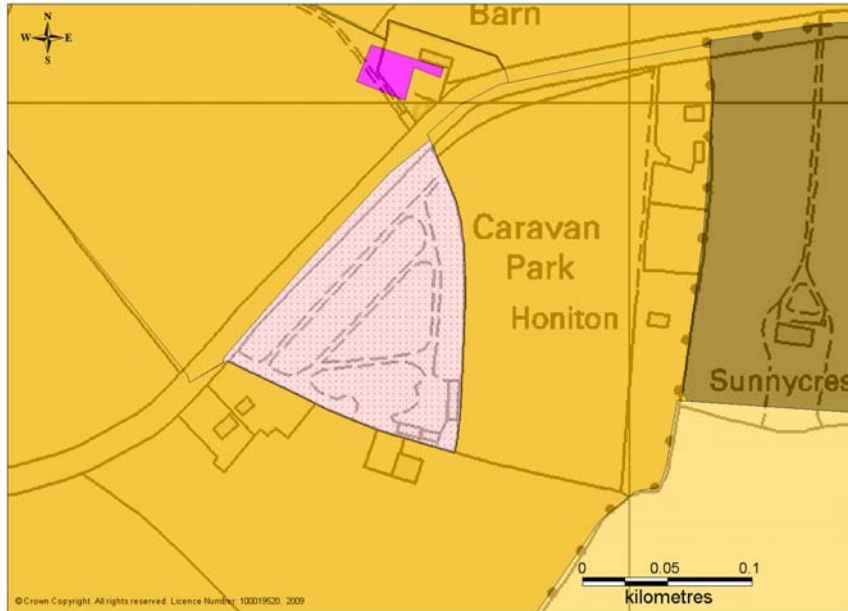
Low - The limited number of sites makes this difficult to assess the potential but some are close to designed landscapes.

Management:

Local Development Frameworks will contain policies for siting of gypsies and travellers.

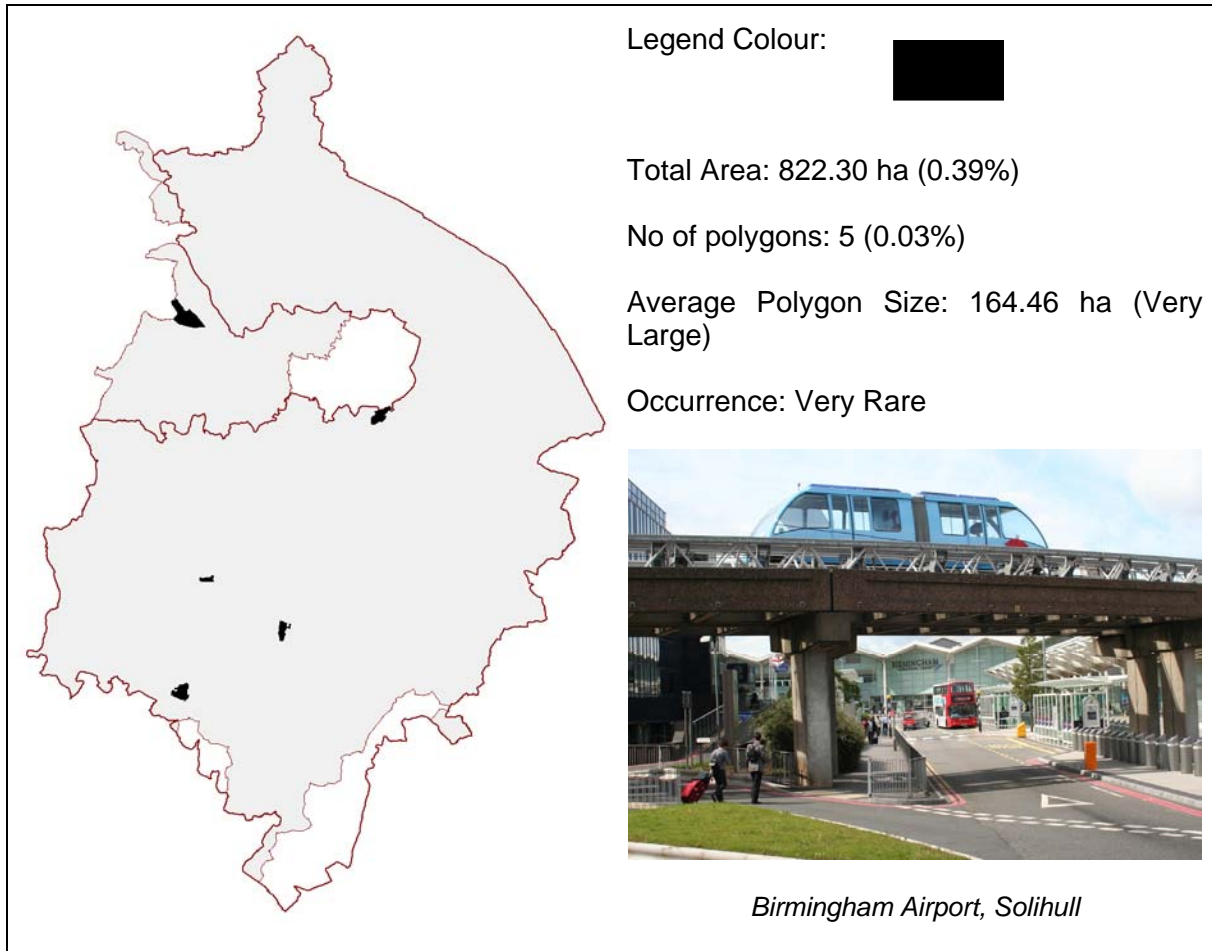
Potential for research on the archaeological signatures left by temporary camps.

Research:



Hill Top Caravan Park, Princethorpe, Rugby

Civil Airport (88)



Definition:

Airports and airfields that are of civil use. A number of these will have been developed for military use and given over to civil use after the Second World War.

Sub-types:

Civil Airport

Description:

There are a number of Civil Airports throughout the county including Birmingham International Airport (in Solihull), Coventry Airport (recently halting passenger traffic) and Wellesbourne airfield which is mainly used for light aircraft. All of these airports developed from World War Two airfields with the exception of Birmingham International which was a municipal airport just before the war. Birmingham International is by far the largest airport and continues to expand.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Moderately (49%)

Trajectory of Change (1955 – 2001):

Stable (-5%)

Reason for change (1880-2001):

Airports developed during the beginning of the 20th century, usually first as military airfields and later as civil airports. Once established they have expanded and increased activity but remain generally stable in size.

Factors influencing further change:

Demand for flying from business and leisure will determine the future of airports as will the availability of aviation fuel as oil resources deplete. These areas are quite stable at the moment and unlikely to

develop in the near future, although Coventry Airport has recently halted passenger flights and is up for sale.

Biodiversity Potential:

Low - By their nature these areas are not very biodiverse, although there are some elements such as grass areas that may support some wildlife.

Archaeological Potential:

Low–Medium - Airports and their facilities can be quite destructive to the archaeology of an area. However some older historic features and military features may remain on the site and there are often large areas of land that have had limited

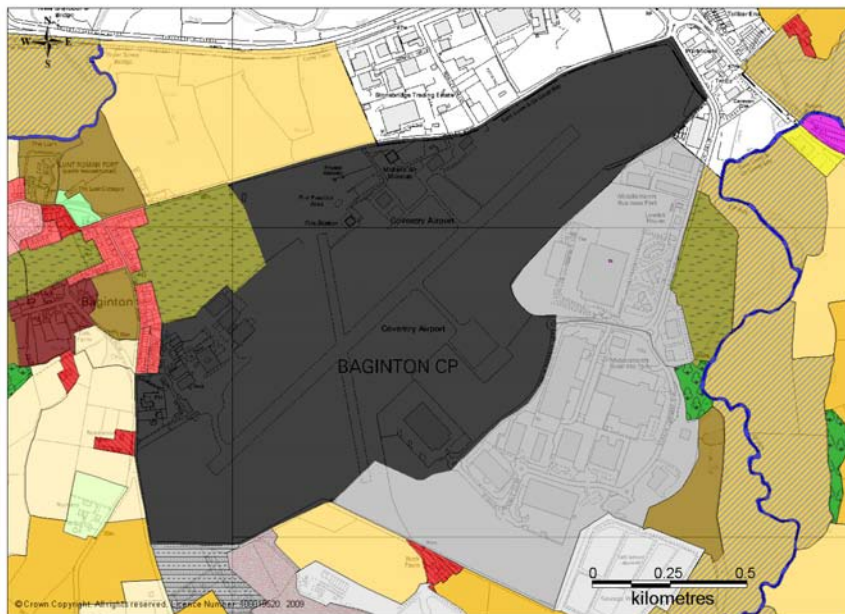
disturbance. In Warwickshire the airfields often have prehistoric features on or near them.

Management:

To maintain and preserve any historic features on site and to consider archaeological potential in the light of any development, expansion or change of use.

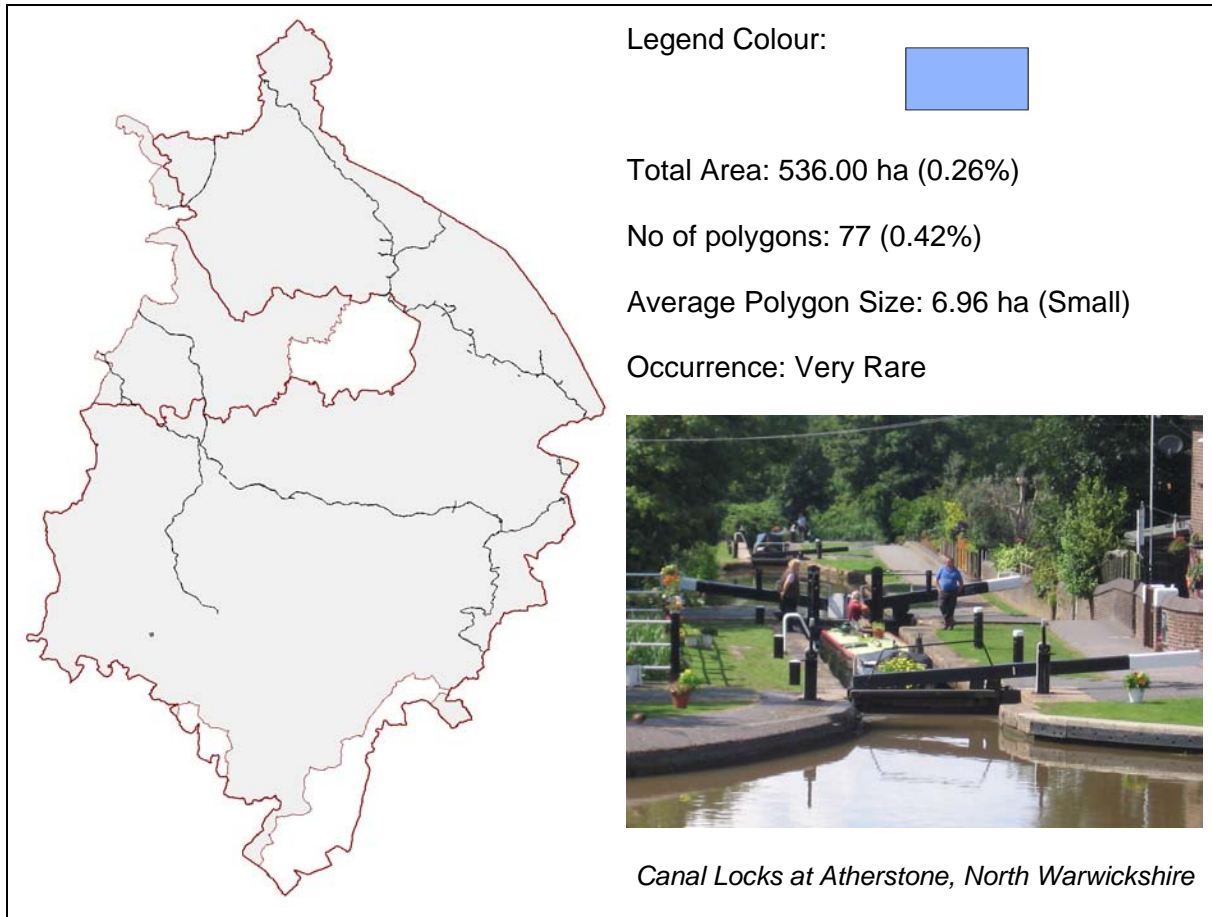
Research:

The development of civil airports could be explored, perhaps at a regional or national level.



Coventry Airport

Canal (90, 87)



Definition:

Areas identified on modern OS maps as being developed and used as artificial waterways including their associated locks, basins and wharfs. This type also includes old canals and canal arms that may have become abandoned and disused.

Sub-types:

Canal Lock/Basin (87)

Canal locks, basins, wharfs and marinas as marked on modern Ordnance Survey mapping.

Canal (90)

Areas developed and used as artificial waterways. In some cases this will include old canals and canal arms that have become abandoned and disused.

Description:

The canal network in Warwickshire is largely complete since its creation with the

Oxford Canal which skirts the east of the county and passes through Rugby and runs north. Part of the Grand Union Canal crosses the county from near Napton-on-the-hill, through Warwick, Solihull and into Birmingham. The Stratford Canal that connects Stratford at the navigable limit of the River Avon to Birmingham whilst parts of the Coventry Canal and Ashby de la Zouche Canal pass through North Warwickshire. The only decline in canals has been from the straightening and improvement to the Oxford Canal (which was originally a contour canal), leaving behind disconnected arms and disused sections.

Period:

18th - 20th century

Trajectory of Change (1880s – 1955):

Small decline (-14%)

Trajectory of Change (1955 – 2001):

Stable (-4%)

Reason for change (1880-2001):

By the 20th century canals in Warwickshire had reached their peak and what followed was a small decline. Most of the established canal network in Warwickshire still exists and remains stable due to its use as a recreational resource.

Factors influencing further change:

Use of and demand of canals as a low carbon means of transport. Tourism industry.

Biodiversity Potential:

Medium - High - Canals attract a variety of water life and aquatic birds. The edges of canals also support a variety of wildlife.

Archaeological Potential:

Medium – Canals and their associated features have become of historic and archaeological interest. Often these areas are associated with earlier industrial archaeological sites and other potential lies in the areas which the canals may have crossed including medieval

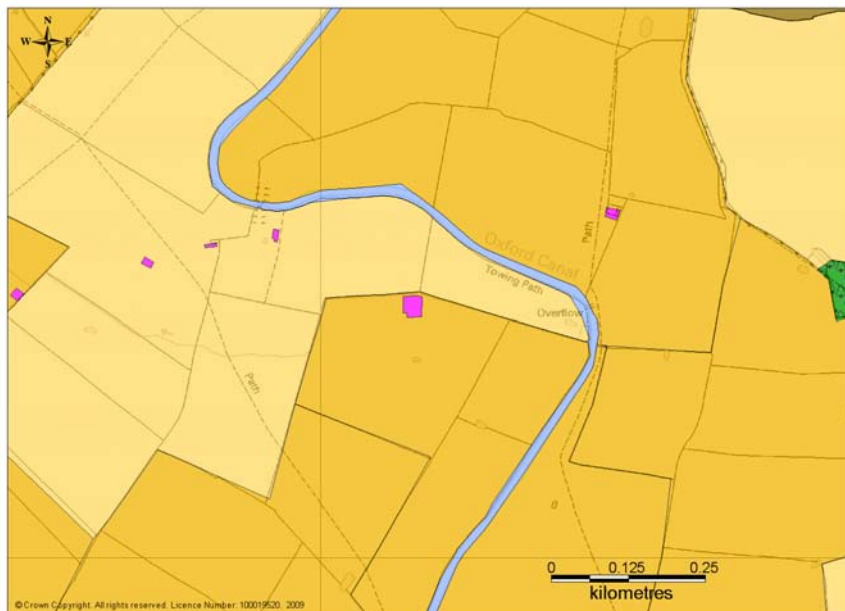
settlement remains, ridge and furrow and prehistoric features.

Management:

Management plans have been developed by British Waterways. Any historic features should be maintained and preserved where possible. Any development or changes should take into account the character of this type. Some archaeological features may be close to or have been cut by the canal and should be appropriately managed.

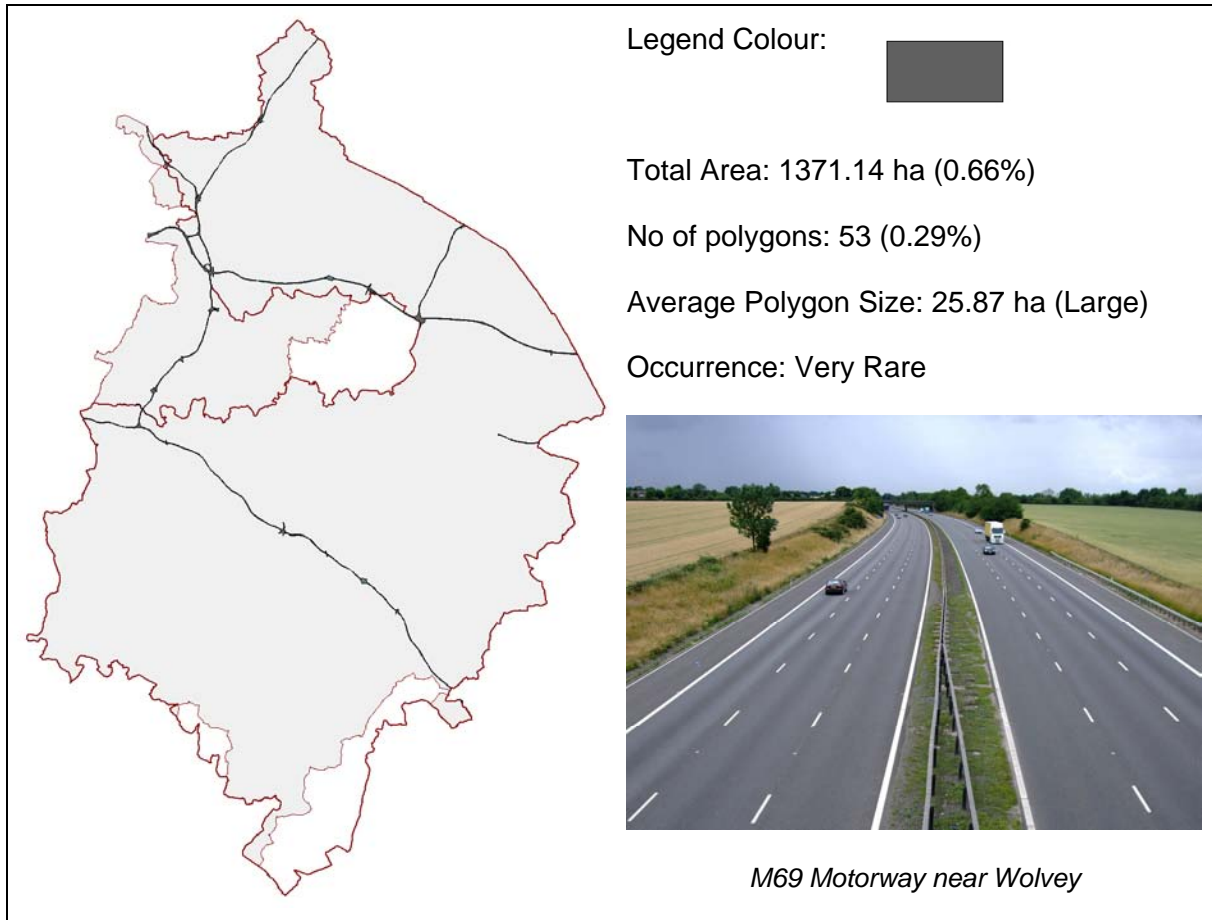
Research:

Comprehensive work has already taken place on the history of canals and related features in Warwickshire and the HER has many features mapped and recorded (Ransom, 1979, Hadfield 1966, Hadfield and Morris, 1962). Some archaeological work has been carried out most recently at Curdworth Toplock on the Birmingham and Fazely Canal (Powell, 2008). Some features of older canals in Warwickshire, such as the remains of the old contour elements of the Oxford Canal, deserve more attention, including mapping and updating the HER.



Oxford Canal near Priors Hardwick, Stratford-on-Avon

Motorway (91, 85, 89)



Definition:

Motorways, associated service areas and major road junctions as marked on modern Ordnance Survey mapping. These will all have been constructed after 1960 and often dramatically alter the landscape.

Sub-types:

Motorway (91)

Motorways as marked on modern Ordnance Survey mapping. These will all have occurred post 1960 and often dramatically alter the landscape.

Major Road Junction (85)

Areas of major road junctions and roundabouts over 1ha in size.

Motorway Service Area (89)

Service areas associated with motorways and marked on modern Ordnance Survey mapping.

Description:

Warwickshire has a number of Motorways passing through it including the M40 which runs southeast to northwest connecting Birmingham to London. The M6, M42, M45 and the M69 all cross Warwickshire. Associated services and large motorway junctions mean that they have had a big effect on the landscape, disconnecting field patterns, woodland and settlements. In terms of size of area they are the dominant transport type in the county but despite this they still make up less than one percent of the total area of Warwickshire.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (65%)

Reason for change (1880-2001):

These developed after World War Two and have continued to be built linking parts of the country together.

Factors influencing further change:

Motorway widening and expansion.

Biodiversity Potential:

Low - Medium - Generally low as nothing exists on the roadway itself. However, some grass features on embankments, cutting and verges may support potentially rare birds and wildlife.

Archaeological Potential:

Low - Apart from the motorway and structures themselves that may become of historic interest there is very little potential for archaeological remains.

Management:

n/a

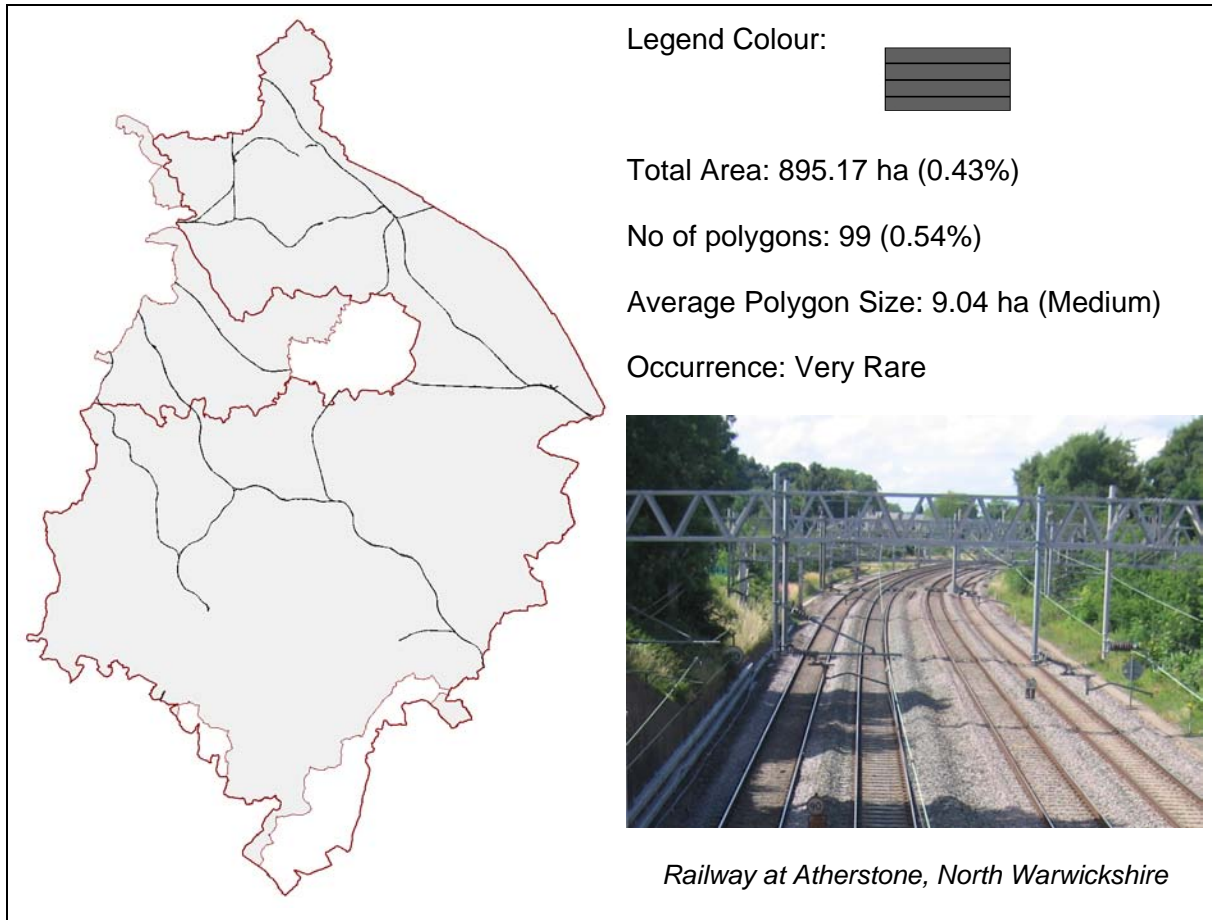
Research:

Research has been carried out into the motorway network in Britain including its origins and development. More recently English Heritage has started a 'Car Project' that will involve looking at the archaeological work that was carried out on some of the motorways (English Heritage, 2010)



M40 Motorway near Barford, Warwick

Railway (92, 86)



Definition:

Modern railways as marked on modern Ordnance Survey mapping including associated train stations and sidings.

Sub-types:

Train Station/Sidings (86)

Areas that form train stations and large sidings as marked on modern Ordnance Survey mapping.

Railway (92)

Modern railways as marked on Modern Ordnance survey mapping. These will often include large areas either side of the railway that formed as part of the construction process such as cuttings and embankments.

Description:

The railway network across Warwickshire is substantial, connecting most large towns and the large cities in the country. The main lines generally form a south east

to northwest pattern connecting London to Birmingham while passing through most of the major towns (Leamington, Warwick, Rugby, Nuneaton, Bedworth, Atherstone, Solihull and Coventry). Most of these lines date to pre 1880s. Stratford is connected to this main line network with a branch line that runs to Warwick; there is also a later line that connects it with Birmingham directly.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Declining Rapidly (-30%)

Trajectory of Change (1955 – 2001):

Stable (1%)

Reason for change (1880-2001):

This form of transport went into decline in the early 20th century; by the late 20th century it has remained relatively stable.

Factors influencing further change:

Increasing population. Increased demand for more efficient transport systems.

Biodiversity Potential:

Medium - Although the main part of the line itself will be of low potential, the sides often contain a variety of species and they act as corridors for wildlife.

Archaeological Potential:

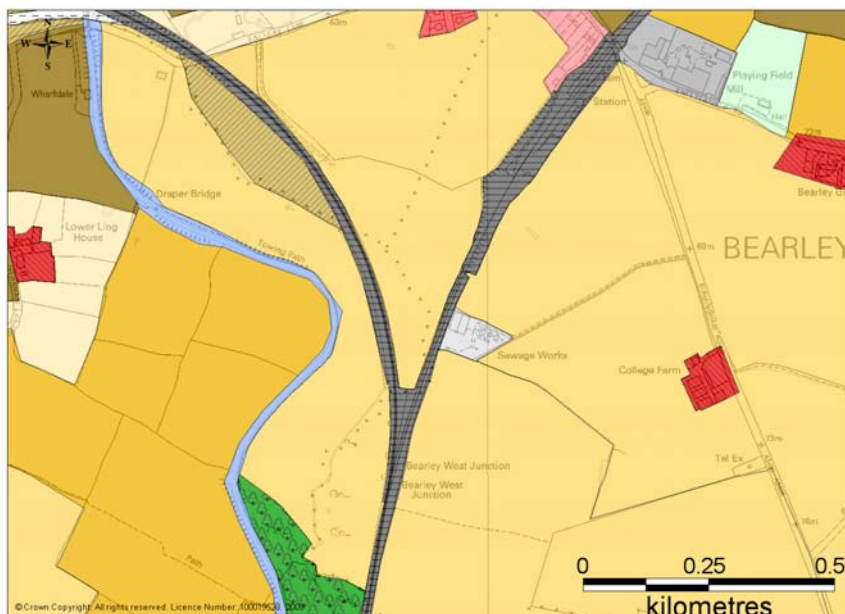
Medium – The lines and associated railway features have become of historic and archaeological interest. Often these areas are associated with industrial archaeological sites. Other potential lies in what these railway lines may have crossed including deserted medieval settlements, ridge and furrow, roman sites and some prehistoric features.

Management:

Any historic features should be maintained and preserved where possible. Any development or changes should take into account the character of this type. Some archaeological features may be close to or have been cut by the railway and should be appropriately managed.

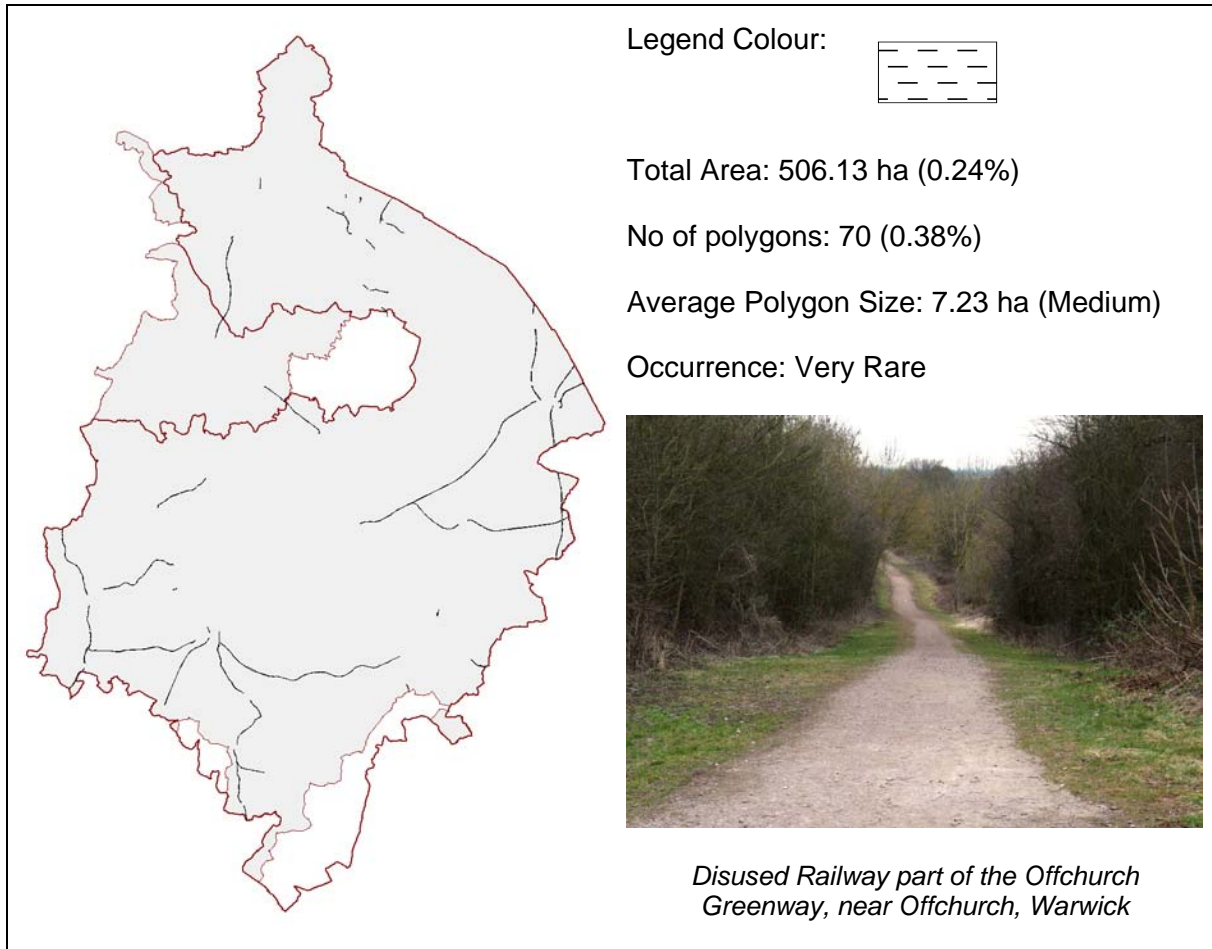
Research:

Comprehensive work has already taken place on the history of railways and railway features in Warwickshire (Hitches, 1997, Kingscott, 2009, Pixton, 2009, Boynton, 1994, Maggs, 1994 and Warwickshire Railways, 2010) and the HER has many features mapped and recorded. Some work on the archaeology of railways has been carried out (Morris, 1999). Industrial railway sites, especially the earlier examples, may warrant more study than the better investigated passenger lines.



Railway Junction at Bearley, Stratford-on-Avon

Disused Railway (93)



Definition:

Areas of land identifiable as a previously active railway lines. These disused railway lines are often marked on Ordnance Survey mapping and when not redeveloped retain a specific landscape character.

Sub-types:

Disused Railway

Description:

There are a number of disused railways in the county. Unlike other HLC types these very rarely change to a different HLC type or become used for any other purposes other than transport. The decline of the railways in the 20th century is reflected in these areas. In Warwickshire the decline started in the first half of the 20th century with many railway lines becoming disused, mainly those that connected towns and had more than one main line running in

the same direction. The largest stretches of disused railway are found in the south where railways used to connect Stratford to various other parts of the country. A large number of disused railways are found leading from Rugby, with a few in the north part of the county often associated with industrial activity such as coal mining.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (1044%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (42%)

Reason for change (1880-2001):

This reflects the decline of the railways in the 20th century.

Factors influencing further change:

Railway industry.

Biodiversity Potential:

High - These areas are generally found as linear formations of un-improved grass or scrub and offer a haven as well as a corridor for a variety of species.

Archaeological Potential:

Medium – The lines and associated railway features have become of historic and archaeological interest. Often these areas are associated with industrial archaeological sites. Other potential lies in what these railway lines may have crossed including deserted medieval settlements, ridge and furrow, roman sites and some prehistoric features.

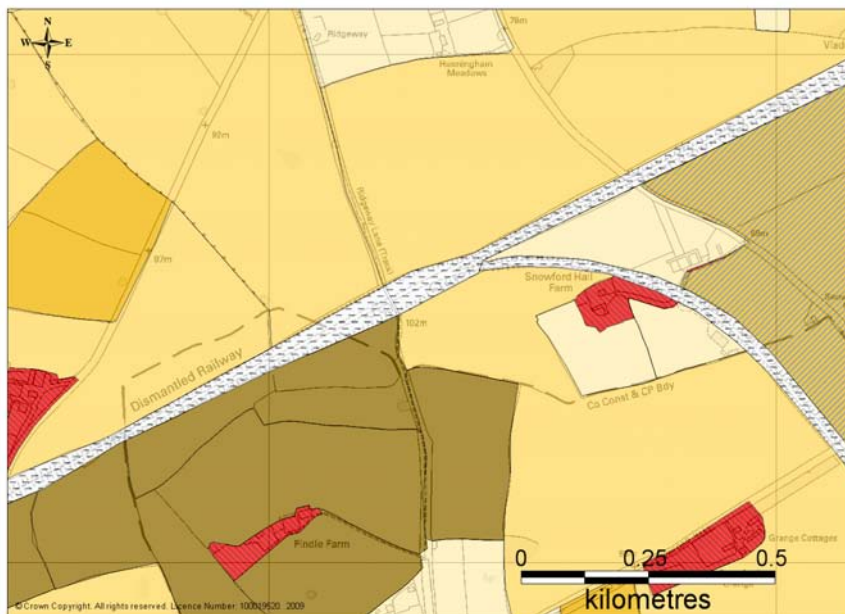
Management:

Any historic features including the line itself should be maintained and preserved.

Any development of these areas should try not to break the lines they form. Where possible lines should be integrated into the development. Any older archaeological features need to be assessed and managed appropriately.

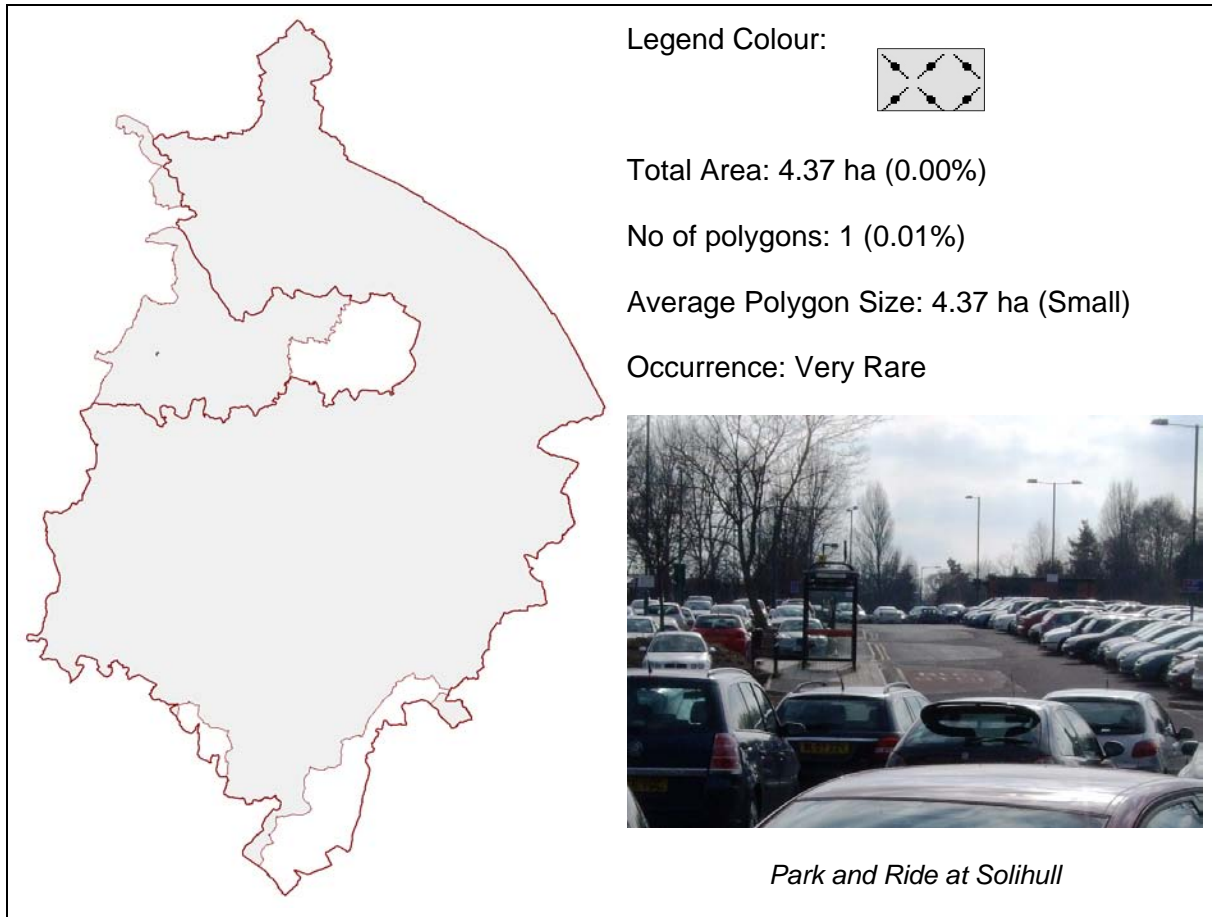
Research:

Further work could be carried out to assess and understand the rate of destruction of disused railway lines. Otherwise, like railways, comprehensive work has already taken place on the history of railways and railway features in Warwickshire (Hitches (1997), Kingscott (2009), Pixton (2009), Boynton (1994), Maggs (1994) and Warwickshire Railways (2010). Some work on the archaeology of railways has been carried out (Morris, 1999). Industrial railway sites, especially the earlier examples, may warrant more study than the better investigated passenger lines.



Disused sections of Railway near Hunningham, Warwick

Park and Ride (94)



Definition:

Areas marked on modern Ordnance Survey mapping as park and ride schemes. These will often be large car parks and associated.

Sub-types:

Park and Ride

Description:

Only one park and ride is recorded being in Solihull. Since the project has started the Stratford Park and Ride has opened and another is planned for Warwick. This remains a very unusual type for the county.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Stable (0%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (100.00%)

Reason for change (1880-2001):

This type is a late 20th century phenomenon.

Factors influencing further change:

Increased policy for park and ride schemes. Lack of use of these schemes could mean they are withdrawn.

Biodiversity Potential:

Low – By their nature these sites do not offer much scope for biodiversity. However they often have green areas associated with them and could be managed to maximise their use of these spaces.

Archaeological Potential:

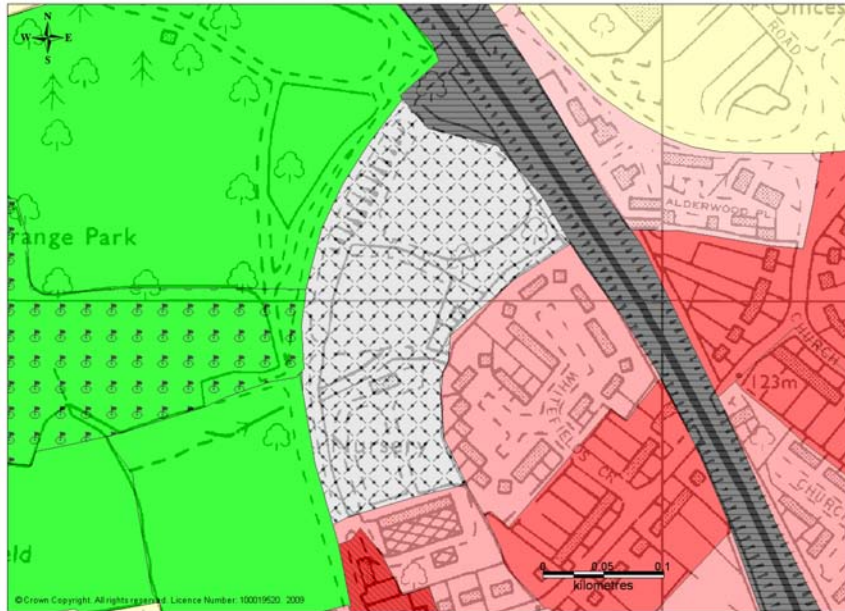
Low – The lack of these sites makes it hard to determine a potential for archaeology.

Management:

Usually managed by local authorities.

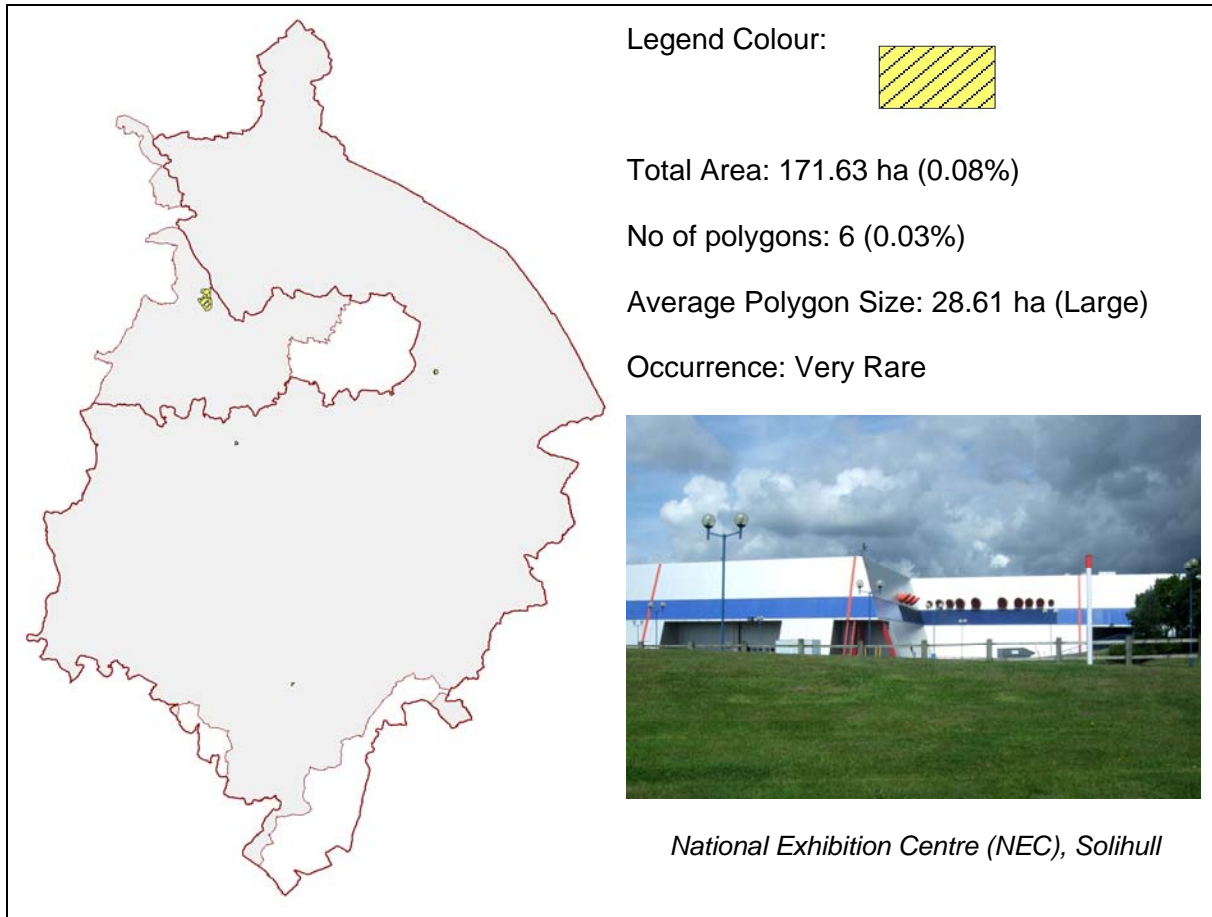
Research:

n/a



Solihull Park and Ride

Stadium/Conference Centre (100, 110)



Definition:

Generally large buildings, stadiums and areas that are primarily used as some form of exhibition or conference centre.

Sub-types:

Exhibition/Conference Centre (100)

Generally large buildings, stadiums and areas that are primarily used as some form of exhibition or conference centre.

Stadium (110)

An area where some form of professional sport is held.

Description:

Only four areas are recorded as conference/stadiums in Warwickshire. One of these is the Coventry greyhound racing track at Binley Woods, just outside Coventry. Two of the others are small conference centres at Wroxley and Ettington which appear to be a modern day use of the historic country houses at

these sites. The last site is the NEC (National Exhibition Centre) which is in Solihull just outside Birmingham.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (100.00%)

Trajectory of Change (1955 – 2001):

Stable (3%)

Reason for change (1880-2001):

Most of these sites have developed after the Second World War

Factors influencing further change:

Increased demand for conference and stadium areas. It is unlikely that present sites will develop into anything else.

Biodiversity Potential:

Medium – By their nature most of these sites have some forms of green space designed into their layout including wooded areas, ponds and lawns. This increases the biodiversity potential but on the other hand they are predominantly large buildings for stadium or conference use.

Archaeological Potential:

Low-Medium – The archaeological potential for these areas is difficult to realise. Some of these sites are set within the context of historic country houses with a medium – high archaeological potential

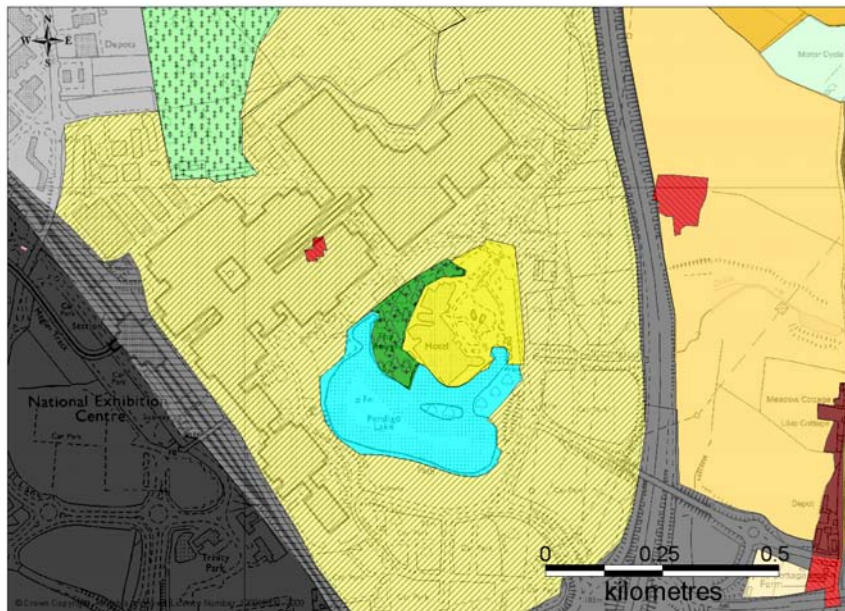
whereas others are large purpose built modern venues which have a low potential. Each site needs to be judged on its own merit.

Management:

Historic country houses should be developed carefully respecting their unique character. Other more modern sites should take into account any underlying archaeology or historic character.

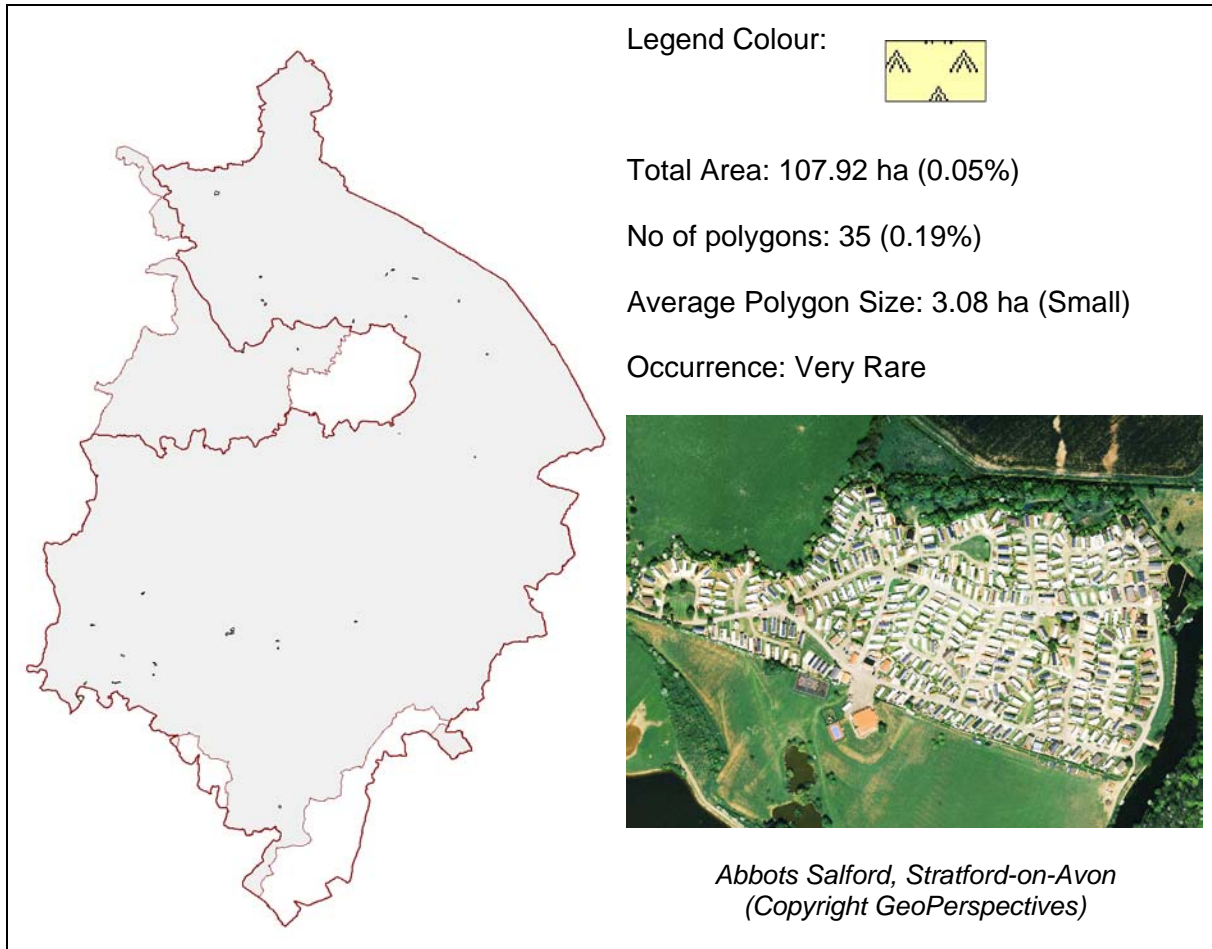
Research:

n/a



National Exhibition Centre (NEC), Solihull

Camping/ Caravan Site (101)



Definition:

Areas of land that are marked as camping and/or caravan sites on modern Ordnance Survey mapping. These tend to be commercial sites usually with a seasonal use.

Sub-types:

Camping/Caravan Site

Description:

There are around 30 individual camping/caravan sites in Warwickshire; all are a recent development after 1955, probably as a result of increased public interest in camping and caravanning. There are some concentrations of sites, particularly on the lower part of the Avon and around Bedworth. There are a number of other sites in North Warwickshire. There is a distinct lack of sites in the central part of Warwickshire around Warwick and Leamington.

Period:

Late 20th century

Trajectory of Change (1880s – 1955):

Stable (0%)

Trajectory of Change (1955 – 2001):

Increasing Rapidly (100%)

Reason for change (1880-2001):

Camping and caravanning started as a leisure pursuit at the beginning of the 20th century but sites in Warwickshire only develop in the later 20th century.

Factors influencing further change:

Demand for leisure pursuit.

Biodiversity Potential:

Medium- These areas are usually quite intensively managed but often contain

some variety of species often planted to enhance the site aesthetically.

Archaeological Potential:

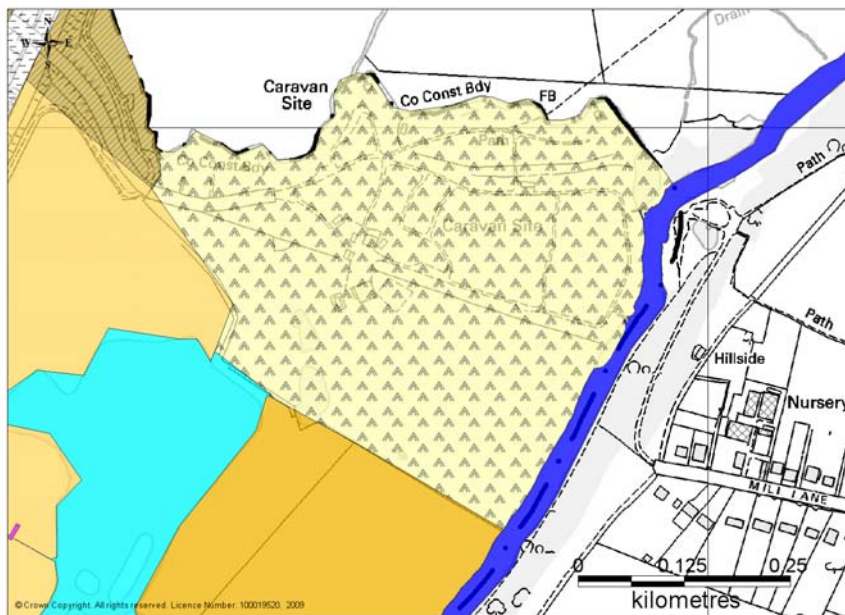
Low- Difficult to ascertain due to limited number of sites associated with this type. Some prehistoric features and medieval settlements lie close to these sites.

Management:

Any historic features should be maintained and integrated as part of the site. Ground disturbance should be avoided on known archaeological sites.

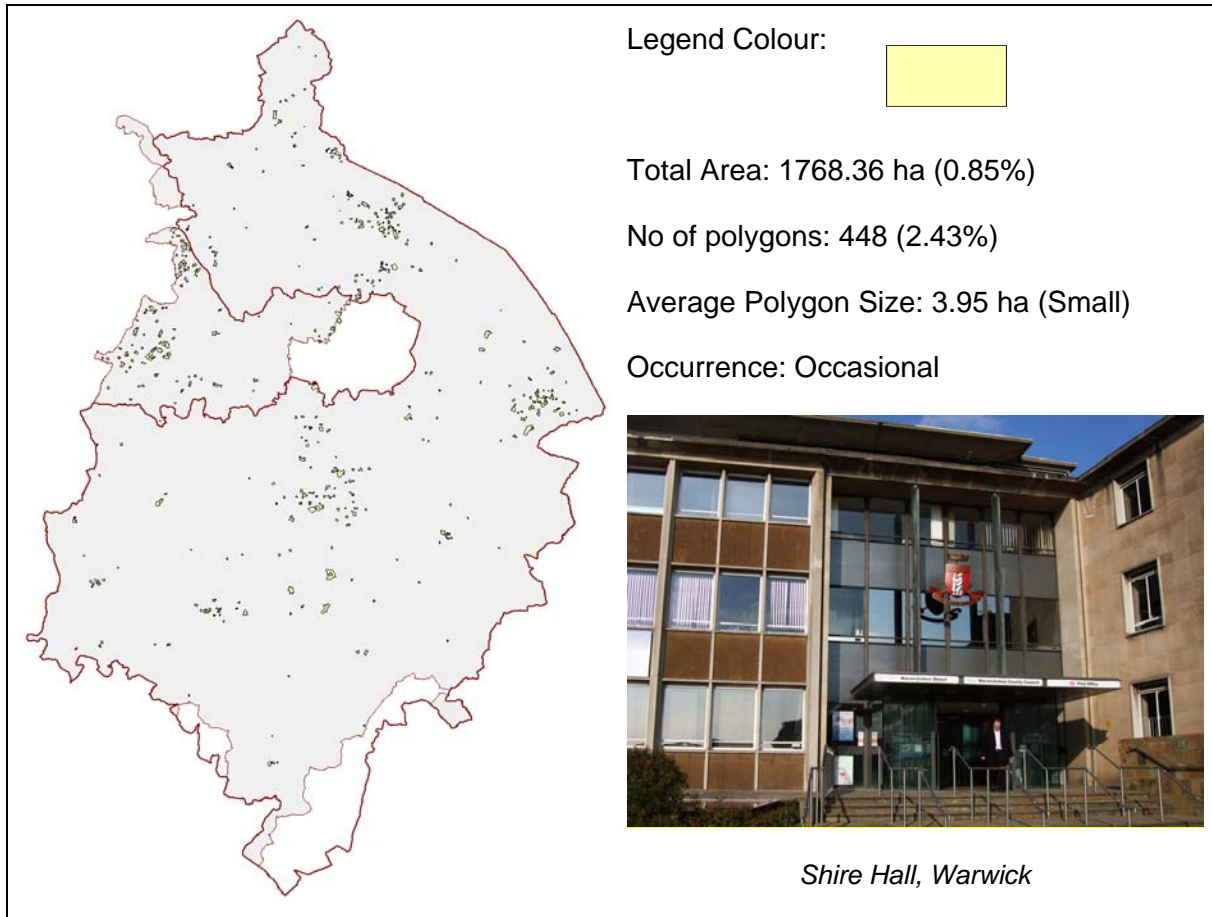
Research:

n/a



Camping and Caravan Park at Abbots Salford, Stratford-on-Avon

Municipal and Civic (95, 96, 97, 99, 118)



Definition:

Areas within larger settlements that are defined by the presence of large civic and municipal buildings including educational establishments, hospitals, care homes, leisure centres, town halls and local authority buildings. In some cases these complexes may also be found on the edge of the urban area or outside it.

Sub-types:

Municipal and Civic (95)

Areas within larger settlements that are defined by the presence of large civic buildings such as town halls, local authority buildings, libraries and museums. In some cases these complexes may also be found out of town.

Educational (96)

Educational establishments including schools, colleges and universities.

Hospital (97)

Areas of large hospital complexes.

Leisure Centre (99)

Areas marked as leisure centres, swimming pools or other leisure activity areas on Ordnance Survey mapping.

Care Home (118)

Usually a nursing home or residential care home as identified from modern OS mapping.

Description:

There is a fairly large number of these in the county. They are mostly found in and around the larger urban areas such as Stratford, Warwick, Leamington, Rugby, Nuneaton, Bedworth, Atherstone, Kenilworth and the urban areas of Solihull and Coventry. Most are modern (post 1955) creations associated with increasing populations and settlements and increasing demand for services. A large number are schools and hospitals and these form the majority of these sites that

have continuity from the end of the 19th century until today, although often with all or parts of them rebuilt. The oldest is the King Edward VI School, Stratford-upon-Avon, parts of which date back to the 15th century, and which boasts the oldest classroom in use in England dating back to 1427. Prisons are recorded in the 1880s but have now been replaced by housing. Other civic buildings tend to be smaller and found more towards the centre of the large towns.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (443%)

Trajectory of Change (1955 – 2001):

Stable (4%)

Reason for change (1880-2001):

This type has increased rapidly linked to the increase in population, housing and focus on services for people and communities in the 20th century. In the later 20th century this has stabilised along with urban expansion.

Factors influencing further change:

The biggest change comes from redevelopment of this type. Very rarely once established does this type change to another one. Redevelopment can affect historic buildings which may be part of these sites.

Biodiversity Potential:

Low - The majority of this type is found in an urban context with the main focus on buildings, consequently the biodiversity potential is low. However recent initiatives in Warwickshire have shown that some of this type such as schools can enhance their biodiversity through organised programmes.

Archaeological Potential:

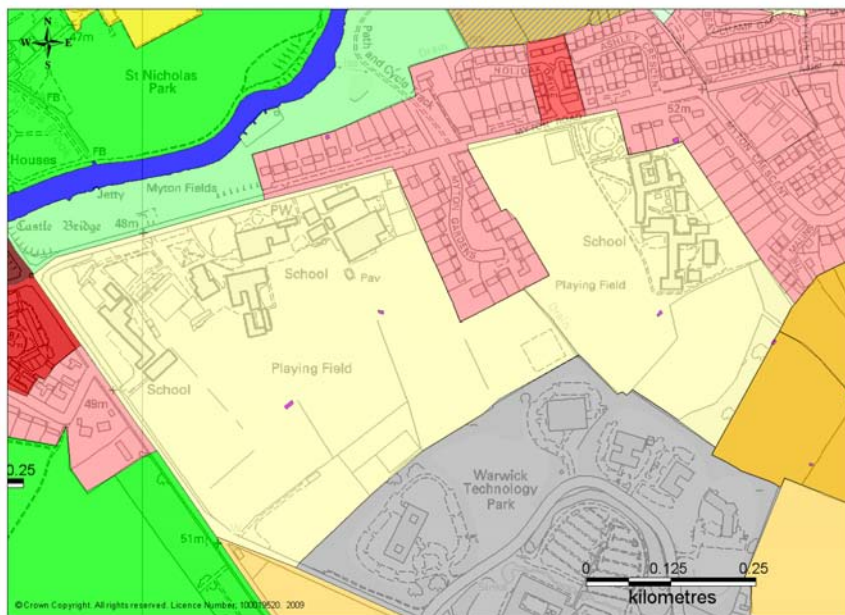
Medium - Very often buildings found in this type have a strong historical value and may lie within or close to historic cores of urban areas which have the potential for earlier archaeological remains. Other types have large areas of open space associated with their function (i.e. school grounds, car parks) and the potential for archaeological remains will be higher. Some sites lie close to or within historic parks and gardens.

Management:

To preserve and manage the buildings and areas with greater historic and archaeological value, especially where they contribute to the character of an area or help shape a sense of place. Where appropriate adaptive reuse of buildings rather than complete rebuild should be considered

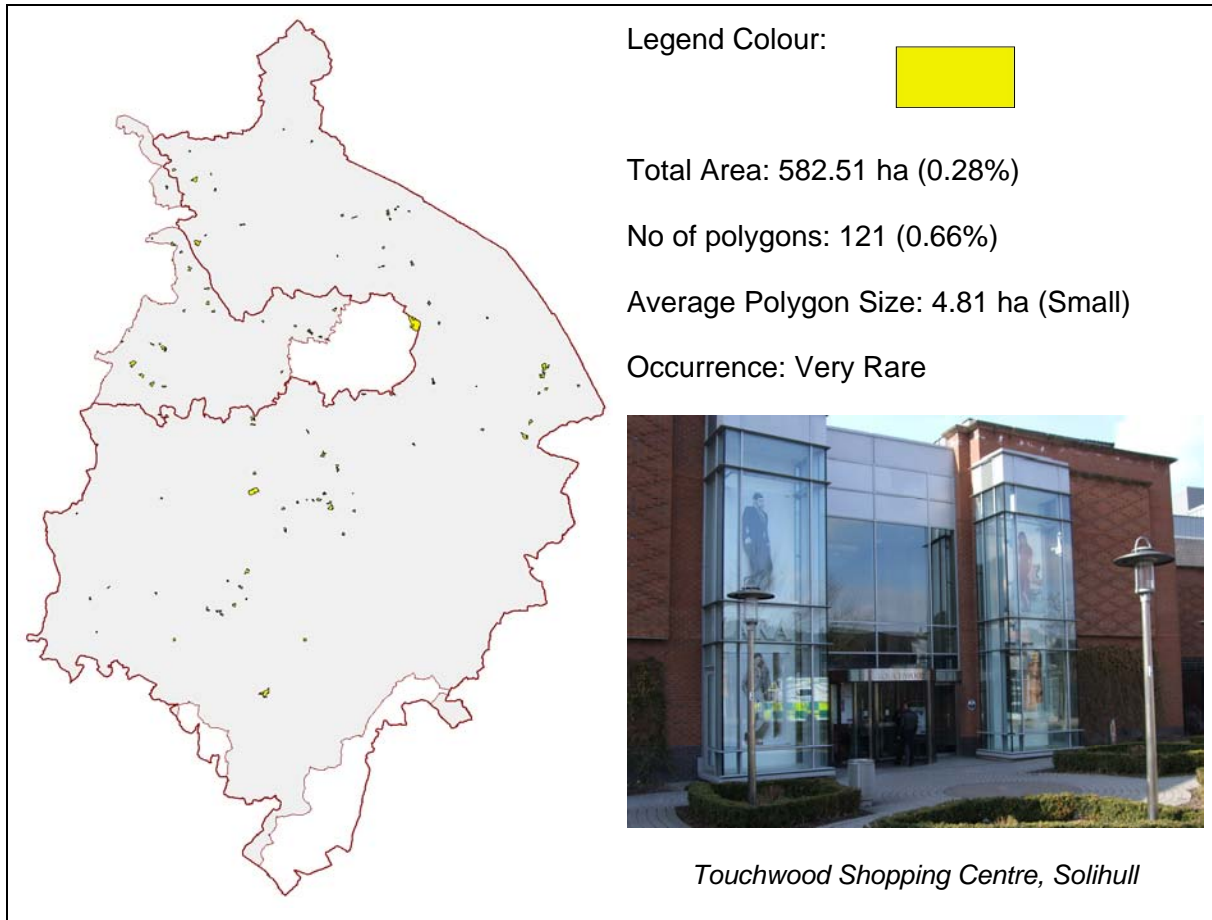
Research:

More research could be carried out into the early development of civic and commercial sites in the county in the 20th century. The RCHME and English Heritage have undertaken a number of thematic studies of some of the HLC Sub-Types within this HLC Type.



Schools at Myton Road, Warwick

Commercial and Retail (98, 102)



Definition:

Areas of large stores, commercial areas, retail parks and hotels marked as such on modern Ordnance Survey mapping. These areas may be found within or on the edge of urban areas.

Sub-types:

Commercial and Retail (98)

Areas of large stores, commercial areas and retail parks marked as such on modern Ordnance Survey mapping. These areas may be found within or on the edge of urban areas.

Hotel (102)

Generally large hotel complexes that are clearly marked on Ordnance Survey mapping. These are very often found outside or on the edge of major settlements.

Description:

These are mostly found in and around the main urban areas of Warwickshire such as Stratford, Warwick, Leamington, Rugby, Nuneaton, Bedworth, Kenilworth and the urban areas of Solihull and Coventry. Other sites further into the countryside are usually hotels. Most of the sites are modern in origin, post 1955, with some older hotels and sites such as Cattle Markets recorded from the 1880s onwards. Many examples of this type are made up from supermarkets and larger commercial centres that have been developed, mostly after 1980, usually on the edge of urban areas.

Period:

20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (3759%)

Trajectory of Change (1955 – 2001):

Increasing Moderately (30%)

Reason for change (1880-2001):

This type expanded rapidly along with population and settlement expansion during the 20th century. In the later part of the 20th century demand for more choice and larger shopping areas has continued this expansion at a moderate pace.

Factors influencing further change:

Increasing population. Increasing demand for a greater variety of shops and services. The commercial and retail markets.

Biodiversity Potential:

Low - These areas by their nature do not afford much potential for biodiversity.

Archaeological Potential:

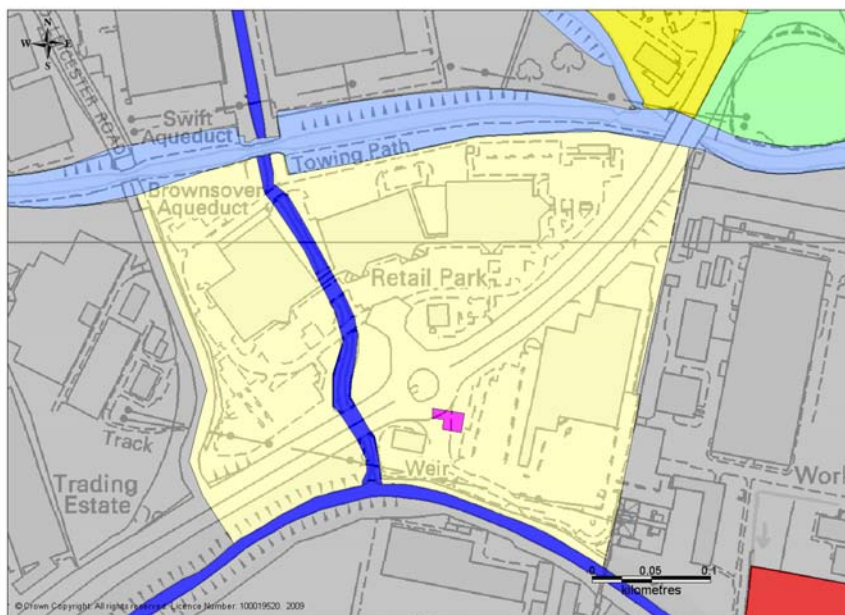
Medium - Hotels and some other commercial sites may be found within designed landscapes or include historic buildings. Central commercial shopping areas tend to be in or near medieval settlements. Some retail and commercial sites are on old RAF airfields.

Management:

To preserve and manage the buildings and areas with greater historic and archaeological value, especially where they contribute to the character of an area or help shape a sense of place. However for the majority of modern sites this will not be relevant.

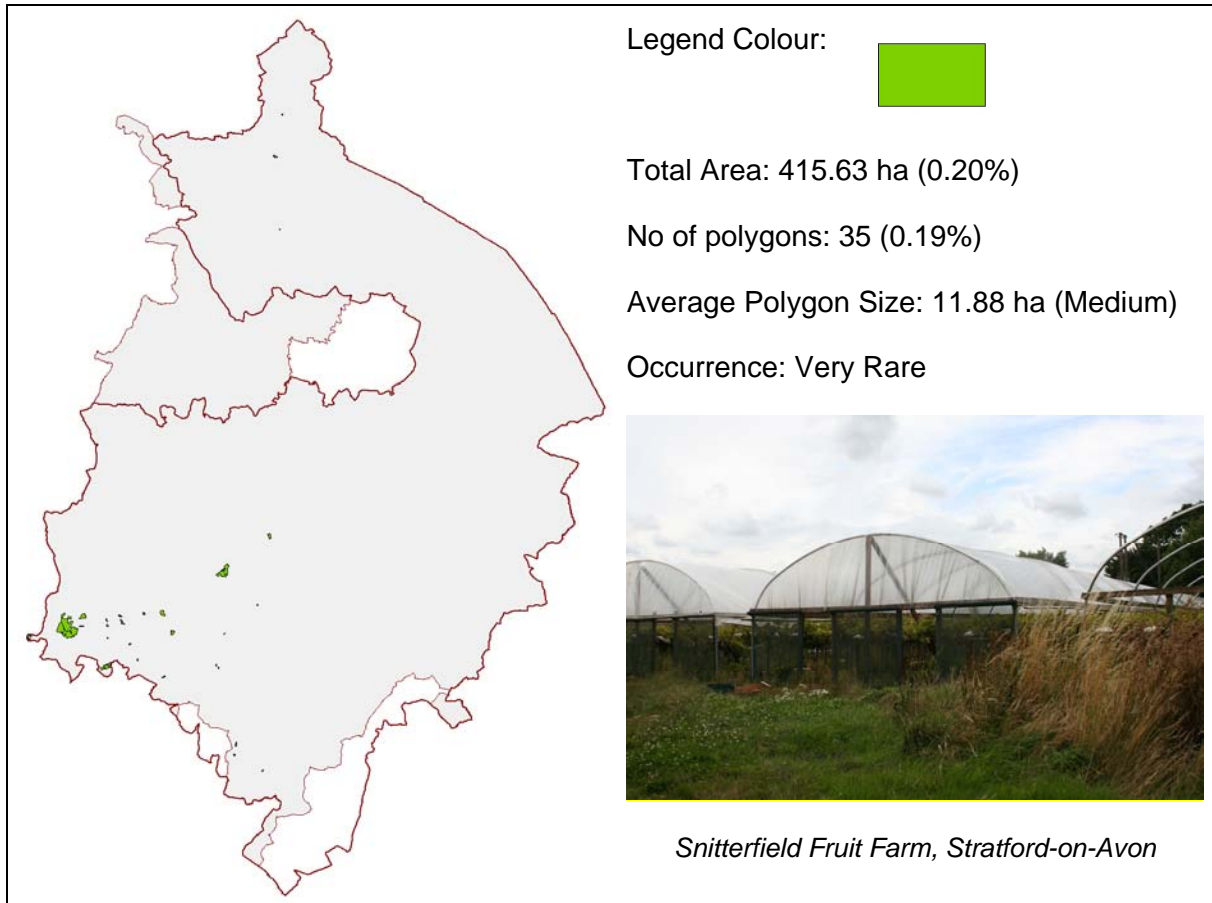
Research:

The history and development of early shopping precincts and retail areas should be further investigated.



Retail Park at Rugby

Orchards (103, 104)



Definition:

Orchards marked on Ordnance Survey mapping.

Sub-types:

Pre 1880s Orchard (103)

Orchards marked on the Ordnance Survey 1st edition mapping. These will generally date to post-medieval or 19th century in origin.

Post 1880s Orchard (104)

Orchards that are marked on modern Ordnance Survey mapping but absent from the 1st edition suggesting a more modern origin.

Description:

Orchards are not a prominent feature in Warwickshire. The majority of them are in the south west of the county in the area of the Avon Valley. A few very small orchards can be found in North Warwickshire. Some large modern post-1955 orchards exist up

to 200 hectares in size, while some of the smaller ones have a longer history, with some being marked on the OS 1st edition. There is no doubt that the orchard industry has declined in Warwickshire since the 1880s with a 60% decline overall. The orchards in Warwickshire used to be much more widely spread across the south of the county with a definite concentration of larger orchards in the south west, similar to the distribution of present day orchards. There always has been a definite lack of orchards in the north and east of the county but a few smaller orchards were recorded in an area northwest of Rugby.

Period:

Medieval- late 20th century

Trajectory of Change (1880s – 1955):

Declining Slowly (-18%)

Trajectory of Change (1955 – 2001):

Declining Critically (-50%)

Reason for change (1880-2001):

The slight decline of orchards in the first half of the 20th century is related to the decline of the industry. This accelerated in the second half of the 20th century and now there are only a few commercial orchards left in the county.

Factors influencing further change:

The decline of this industry is related to increased competitiveness with foreign fruit producers. Orchards could increase again if the market conditions allowed; however it is unlikely. The restoration and reinstatement of orchards is permissible under Environmental Stewardship, but the effect of this has yet to be seen in Warwickshire.

Biodiversity Potential:

Medium-High - Orchards and especially older orchards attract a unique set of

species not to mention the fruit trees and plants themselves. Traditional orchards are a UK BAP Priority habitat.

Archaeological Potential:

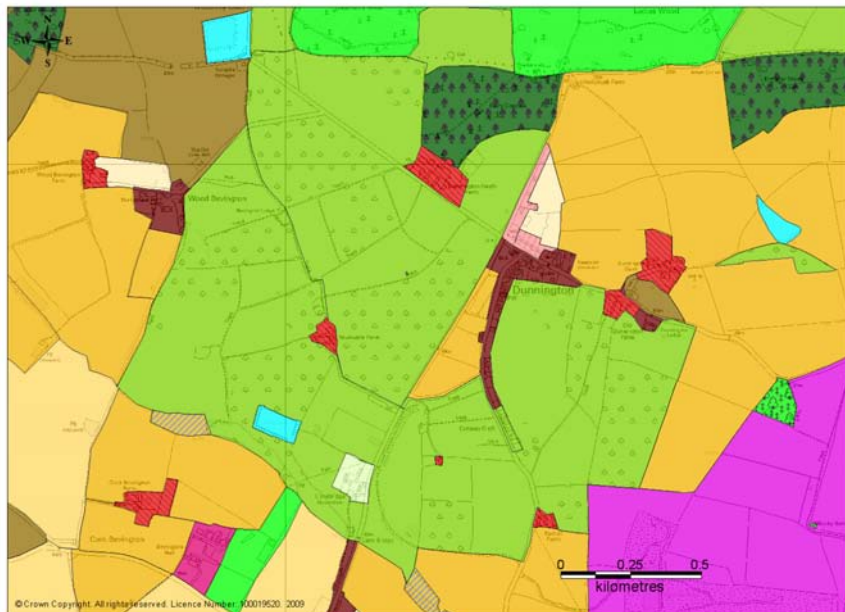
Medium - Older orchards may have the potential to preserve earlier remains from other more damaging land uses. The potential for archaeological remains for more modern orchards remains unknown; very few sites are associated with this type.

Management:

Maintenance of orchards and preservation of any known archaeological features.

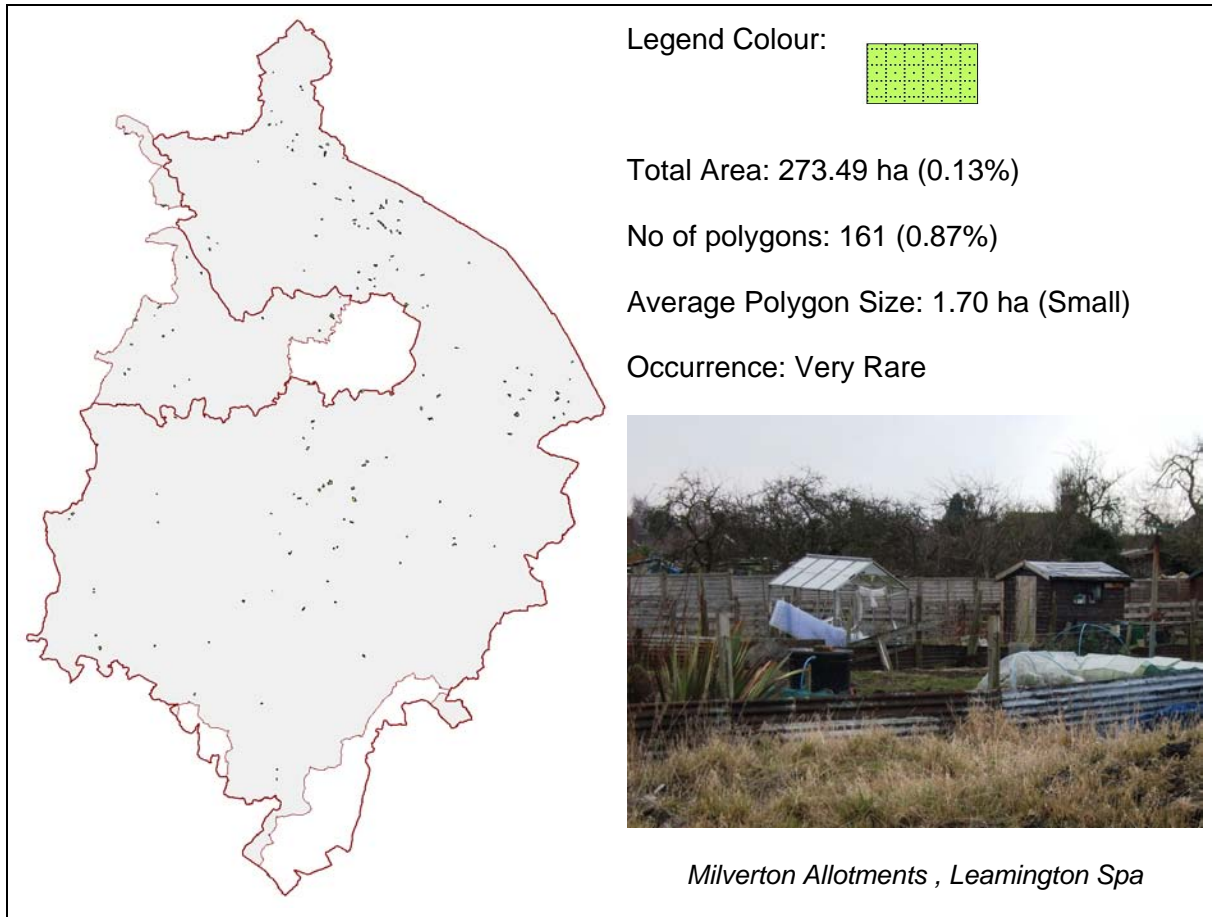
Research:

More work is needed into the origins and development of orchards in Warwickshire. Smaller orchards associated with farmsteads and villages could be mapped and analysed.



Orchards at Dunnington, Stratford-on-Avon

Allotments (105, 106)



Definition:

Allotments marked on Ordnance Survey mapping.

Sub-types:

Pre 1955 Allotment (105)

Allotments marked on the 1955 edition Ordnance Survey mapping. These will probably have been laid out prior to or during the Second World War.

Post 1955 Allotment (106)

Allotments marked on modern Ordnance Survey mapping but not on the 1955 edition.

Description:

Allotments tend to be fairly small but they are frequently found in and around the main urban areas of Warwickshire such as Stratford, Warwick, Leamington, Rugby, Nuneaton, Bedworth, Kenilworth and the urban areas of Solihull and Coventry. They have declined since the beginning of the

20th century where generally larger allotments were associated with the historic cores and developing towns. There was a definite expansion around the 1950s, probably as a result of the Second World War. Since then allotments have become smaller but just as numerous with some still being created after 1955. Some areas in Warwickshire outside of the main towns have been recorded with distinct formations of parallel tracks marked on the OS 1st edition onwards, and it may be that these were allotments also, although their position away from the main urban areas is intriguing. Allotments are marked on the OS 2nd and 1955 editions as well as modern OS maps but they do not appear on the OS 1st edition and this could have skewed the results somewhat.

Period:

19th - 20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (56%)

Trajectory of Change (1955 – 2001):

Declining Rapidly (-38%)

Reason for change (1880-2001):

In the first half of the 20th century allotments increased, partly due to the two world wars and partly due to them being more clearly mapped on later ordnance survey maps. There has been a rapid decline after 1955 but they are now gaining popularity once again.

Factors influencing further change:

Few new areas of allotments are being created even though demand is quite high in Warwickshire with long waiting lists for use of an allotment. Due to their location in and around settlements they are under threat from settlement expansion or private enclosure.

Biodiversity Potential:

High - Despite being intensively managed the wide variety of vegetable and fruit species combined with grass divisions, compost heaps and hedgerows give a high biodiversity value.

Archaeological Potential:

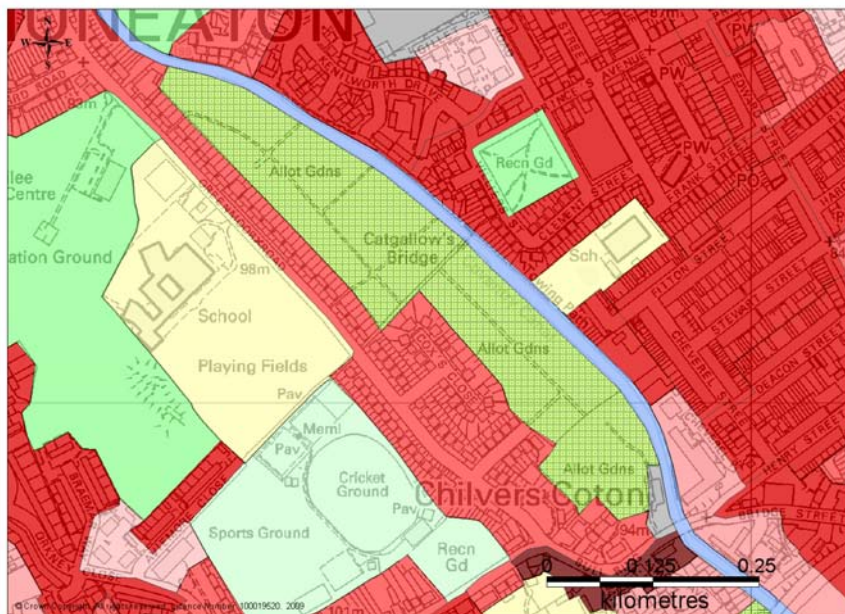
Low - Apart from the allotments themselves which are increasingly of historic interest the intensive ground use leaves few archaeological deposits intact. However many allotments are located close to medieval or deserted medieval settlements.

Management:

Managed by local authorities and allotment clubs and societies.

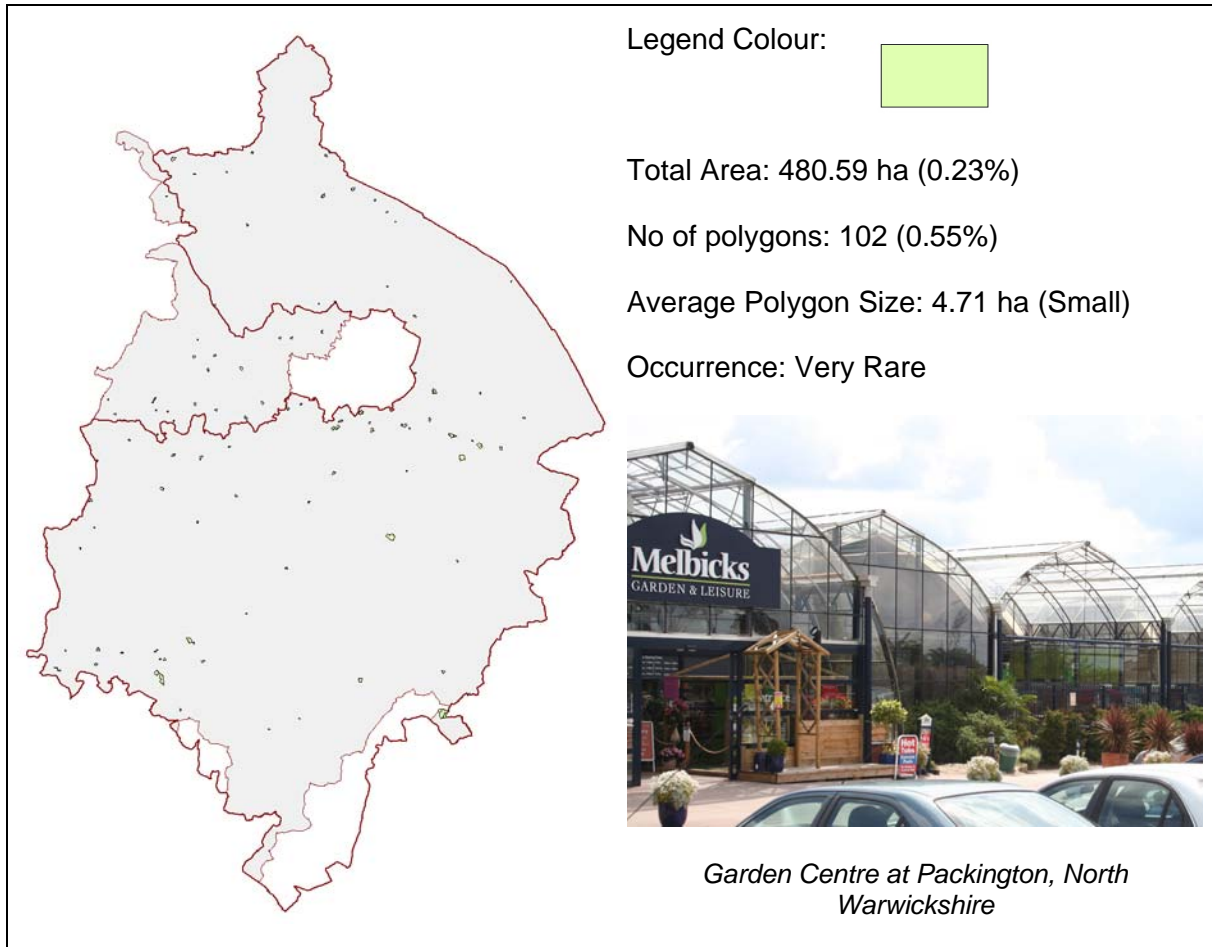
Research:

More work could be done to understand older pre-1880 allotments in Warwickshire.



Allotments at Chilvers Coton, Nuneaton and Bedworth

Nursery/Garden Centre (107)



Definition:

Nurseries and garden centres identified from modern Ordnance Survey mapping.

Sub-types:

Nursery/Garden Centre

Description:

These generally small sites are found concentrated in certain areas in the county. Most are found in a central band from Solihull to Rugby running just south of Coventry. The second concentration is found downstream of Stratford. Finally, a small concentration of nurseries is found in North Warwickshire along the Anker from Nuneaton to Atherstone. A few others are distributed around the rest of the county with some notable sites such as the National Herb Centre (60 hectares in size). Some nurseries are recorded on the OS 1st edition and no longer exist; these were in Leamington, Warwick, Stratford,

Kenilworth, Atherstone and Solihull. There has generally been a large increase in this type during the 20th century with this rise slowing towards the end of the 20th century.

Period:

20th century

Trajectory of Change (1880s – 1955):

Increasing Rapidly (1278%)

Trajectory of Change (1955 – 2001):

Increasing Slowly (16%)

Reason for change (1880-2001):

These appear to have grown in popularity at the beginning of the 20th century and this has continued at a slightly lesser pace in the later 20th century.

Factors influencing further change:

This type depends on the garden and nursery industry. Increasing competition from supermarkets and large DIY chain stores could reduce the amount of these in the landscape. These sites could be developed for other commercial activities or even housing.

Biodiversity Potential:

Low - medium - Most nurseries and garden centres are strictly controlled and do not have a very high potential; however; others grow a much wider variety of species attracting related wildlife.

Archaeological Potential:

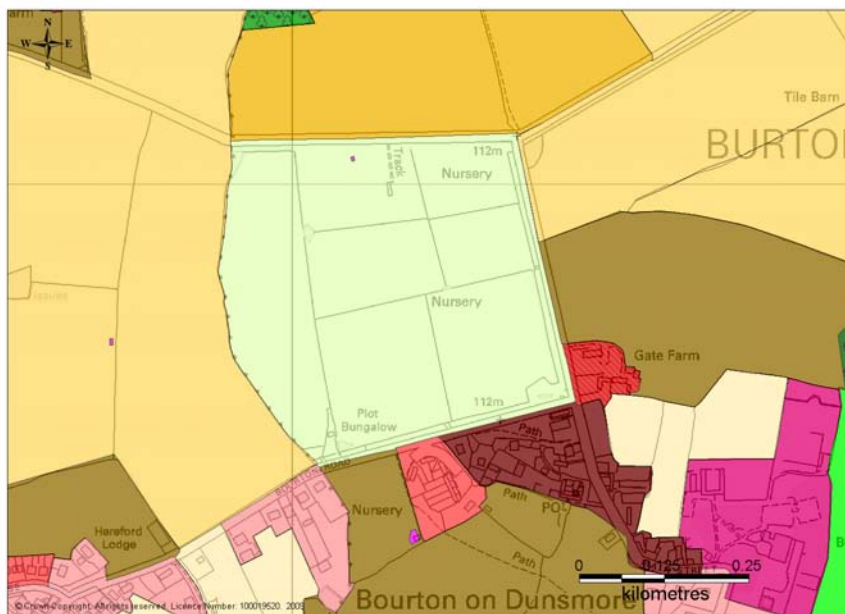
Low - By their nature these sites usually destroy most archaeological deposits. However, many sites are near to medieval or deserted medieval settlements and some are near prehistoric sites.

Management:

Managed by each individual nursery/garden centre.

Research:

The origins and early development of nurseries in Warwickshire is not well documented



Nursery at Bourton-on-Dunsmore, Rugby

Chapter 5 - Countywide Analysis

Introduction

The objective of this chapter is to consider how landscape characterisation has developed historically in Warwickshire, and how HLC can be used at a broad countywide level to analyse particular aspects and themes of the historic landscape including comparison with other data sets.

Firstly, previous characterisation work such as the Land Utilisation Survey of Britain, Historic Landscape analysis by Della Hooke, the National Character Areas, the Warwickshire Landscape Guidelines and other characterisation work is summarised and compared to the Warwickshire HLC.

Following this, other datasets are investigated to see how they can inform and be informed by the HLC.

Administrative boundaries in the county are also analysed using the HLC.

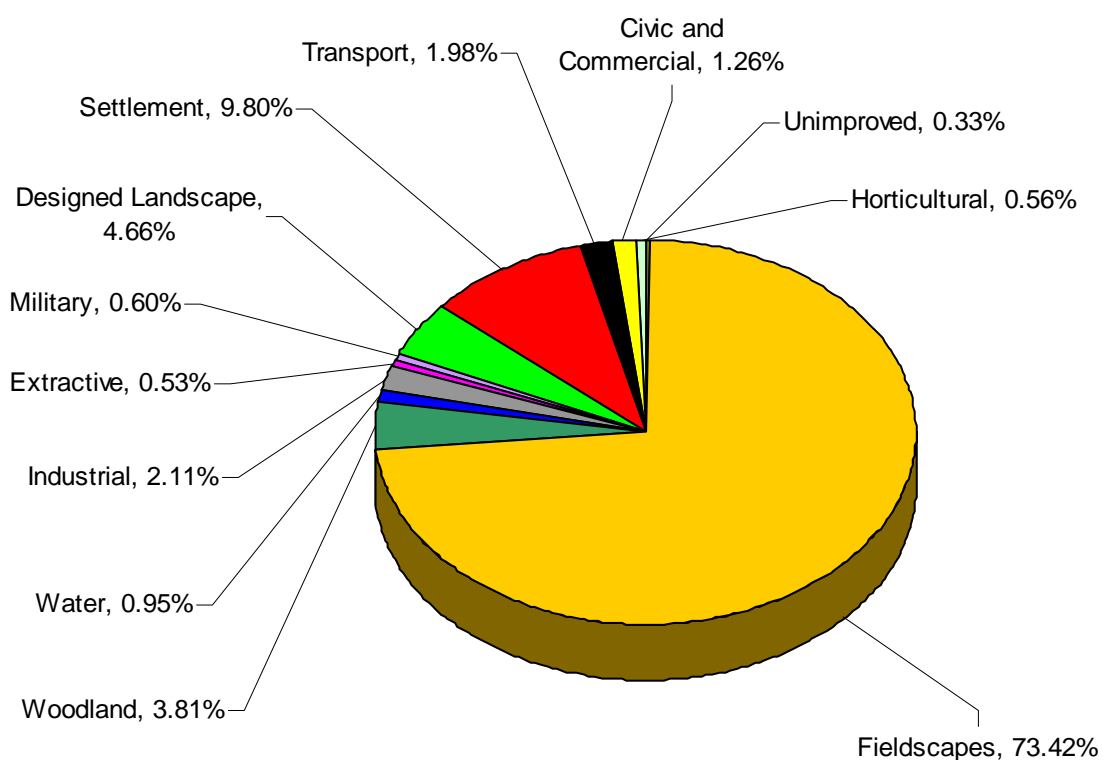
Finally, a thematic approach is taken by using HLC to understand the Historic Sporting Landscapes of Warwickshire.

For analysis of specific HLC Broad Types and HLC Types at a county-wide/project-wide level it is best to refer to the previous two chapters.

A summary of HLC Broad Types in the project area is shown below. This helps to gain a broad overview of the Historic Landscape Character of the county.

Table of HLC Broad Types in Warwickshire

HLC Broad Type	Total Area (ha)	Percentage of County
Unimproved	680.89	0.33%
Fieldsapes	153629.48	73.42%
Woodland	7982.15	3.81%
Water	1981.25	0.95%
Industrial	4405.92	2.11%
Extraction	1106.14	0.53%
Military	1258.05	0.60%
Designed Landscapes	9756.63	4.66%
Settlement	20500.78	9.80%
Transport	4148.89	1.98%
Civic and Commercial	2630.42	1.26%
Horticultural	1175.60	0.56%

**HLC Broad Types in Warwickshire**

HLC analysis compared to previous characterisation work

Land Utilisation Survey of Britain

Although not a characterisation study in itself, this survey and analysis of the landscape provided the first comprehensive classification of England into types, albeit land use types rather than character. The survey is a useful snapshot of the landscape and its use in the 1930s and possibly the first comprehensive analysis of the entire landscape.

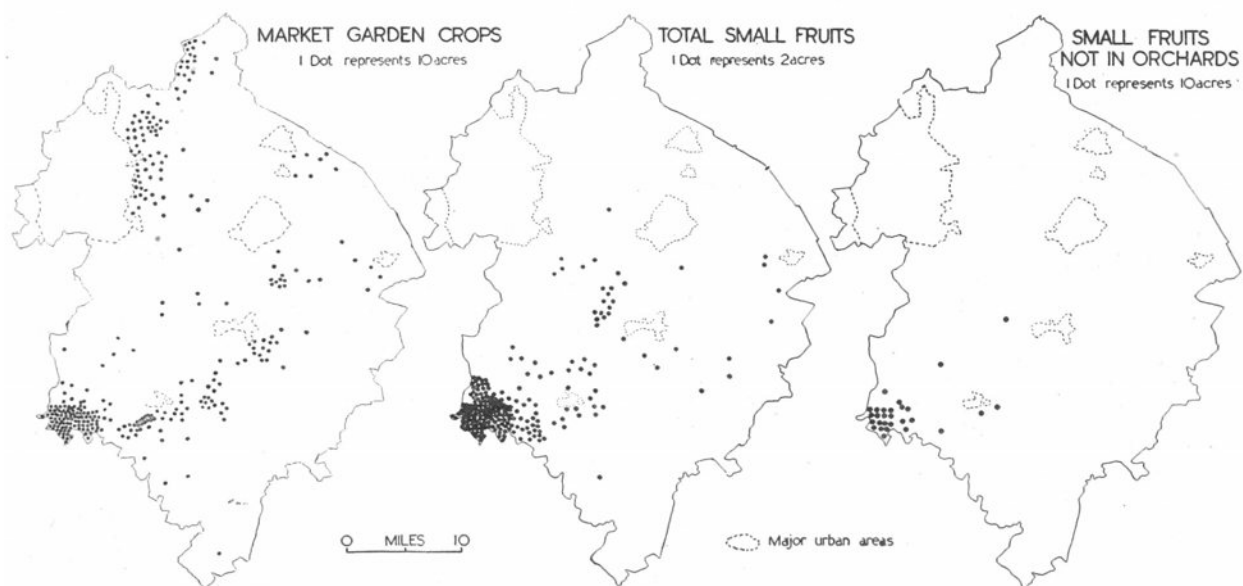
The maps are available to view at <http://visionofbritain.org.uk>

A report was produced in a number of parts each representing a county area. Warwickshire formed part 62 and included Birmingham, Coventry and Solihull. Although the survey work was carried out in 1931, delays in compiling the maps and preparing the report meant that Warwickshire was the last county to have the report published in 1946 after the Second World War.

The report provides a useful summary of the landscape of Warwickshire including relief, river systems, physical regions, geology, climate and soils. There is even a reference to the division into the areas of the Feldon, Arden and Avon Valley that have historically been used to describe Warwickshire.

In terms of land use, percentages of arable, permanent grass and rough grazing are given (20%, 77% and 2.4% respectively)

Market garden crops are also shown (see maps below), showing a pattern that is hard to deduce from the HLC data. Market gardening appears to be concentrated in the southwest of the county with some on the river Avon as far as Bubbenhall. A second smaller concentration is shown in North Warwickshire and appears to be mainly peas, cabbage and cauliflower (88%). Orchards only make up 3.4% of the study area and are mainly in the Salford Priors and Bidford-on-Avon area.



Market garden crops and Small Fruits in Warwickshire, taken from the Land Utilisation Survey of Britain (McPherson, 1946)

The rough grazing identified in the county matches those areas of common identified in the HLC such as at Baddesley and Baxterley, Yarningale Common and areas in Solihull.

A summary of woodland change between 1895 and 1924 is given in the report which shows that woodland declined by 10% in that period, from 3.3% to 3% of the total area. The HLC shows that between 1880-1955 woodland declined by 52%, agreeing with this decline but showing a much more accelerated rate.

The lack of woodland in the south east of the county is also noted and matches the HLC, with more woodland shown in the traditional Arden area in the north and west of the county.

The report mentions that some analysis of tithe maps was carried out in Warwickshire and shows that all the larger woods and most of the smaller ones were already in existence in 1846. Greenwood's map of 1822 does go some-way to support this but in the 20th century there was an increase in the number of plantations and this statement by the Land Utilisation survey may be misleading.

Industrial areas are mentioned and show that at the time (1931) the main industrial centres were around Rugby, Leamington, Stratford and Coventry.

Coal mining is also mentioned along with quarrying in the Hartshill Quartzite ridge between Nuneaton and Hartshill and lime and cement works at Bishops Itchington, Stockton and west of Rugby.

The rapid expansion of settlements between 1841 and 1931 is noted especially the 'doubling in size of Birmingham every 30 years'. Most large towns and their changes in the last 100 years are noted. The differences in general settlement pattern across the county are also noted, with nucleated villages in the south and east of Warwickshire and scattered smaller settlement and farmsteads in the north and west. More specific types of settlement, such as hilltop villages, ridge-way settlements, villages on border zones and valley villages are noted. This is very much an historic geographer's approach which ties in the village locations much more to geology and landform. This approach could benefit any further settlement analysis by HLC or perhaps the future EUS project that is proposed for Warwickshire.

Land Use Regions are mapped and described in the report and are in a similar vein to broad Historic Landscape Zones or Areas and perhaps these could be used in a future enhancement project with the HLC. The Land Use Regions identified, however, are very much based on physical, geological and agricultural land uses rather than relating more directly to historic landscapes.



Major Land Use Regions in Warwickshire identified in the Land Utilisation Survey of Britain (McPherson, 1946)

The report concludes by showing how land use in Warwickshire is very much related to geological, physical, historical, economic and human geography.

A warning is given on the continued expansion of the main urban areas especially around Birmingham, which could affect valuable agricultural land. Emphasis is put on the decline of arable land in Warwickshire between 1841 and 1941 so that by 1931 Warwickshire had one of the highest proportions of grassland in England. Reference is also made to the wartime mechanisation of farming and the more intensive land use. The tone of the time though was that this increasing mechanisation and agricultural intensification could only be a good thing upon which a "prosperous agricultural community can be built and maintained."

Conclusion

This survey and report is a very useful insight into land use and a perspective on the landscape of Warwickshire in the 1930s-40s, with some valuable references to the development of aspects of the landscape such as woodland and settlement between 1841 and 1941. It is not characterisation as we know it but it is a useful historic landscape study that is perhaps underused throughout the country especially in HLC or Landscape Character work.

Early Historic Landscape Character Work

The next example of characterisation in Warwickshire, and one that had a much firmer focus on the historic landscape, is Della Hooke's work on Shakespeare's Countryside (Holliday et al, 1988). This booklet dealt with many historic landscape issues and included a map showing an early form of HLC with different historic landscape types such as settlement, woodland, deer parks, and distinct field types.

Further work was carried out in the late 1980s for the Warwickshire Landscape Project whose main products the Warwickshire Landscape Guidelines are analysed further below. A separate publication entitled Warwickshire's Historical Landscape – Arden (Hooke, 1993) was directly aimed at understanding historic landscapes and their development in this part of Warwickshire. A map was also included with an even more detailed attempt at characterising the historic landscape including commons and distinct field patterns (small irregular, medium sized and large geometric fields). This booklet was produced in 1993 with the aim of further booklets and maps to make up the whole county. However this appears to be the only one that was ever published, although the background research and work for others in the series appears to have been undertaken.

Further more detailed work has been done by Della Hooke recording historic landscape features across the county including, where possible, medieval landscape features. This information could be compared with the HLC and possibly used to update the description of HLC Sub-Types. A future enhancement project for the HLC could analyse these maps in detail, possibly scan them in and use them with other sources to update the HLC dataset.

Warwickshire Landscape Guidelines (WLG)

The Warwickshire Landscape Guidelines were the end products of The Warwickshire Landscape Project undertaken for Warwickshire County Council by Steven Warnock in 1987 and designed to offer advice on maintaining the diversity and beauty of the landscape and to ensure that it was conserved for the future.

A booklet covering the Arden area with maps and advice was published in 1990. Two other booklets followed in 1993 covering the rest of the county split into the Dunsmore, High Cross Plateau and Mease Lowland areas and the Avon Valley, Feldon and Cotswolds areas. The Arden booklet was also republished at this time to make a matching set of three guidelines booklets.

This project was the ancestor of the now nationally established procedures for Landscape Character Assessment and the layout of that Assessment followed by its Strategies and Guidelines is a familiar one

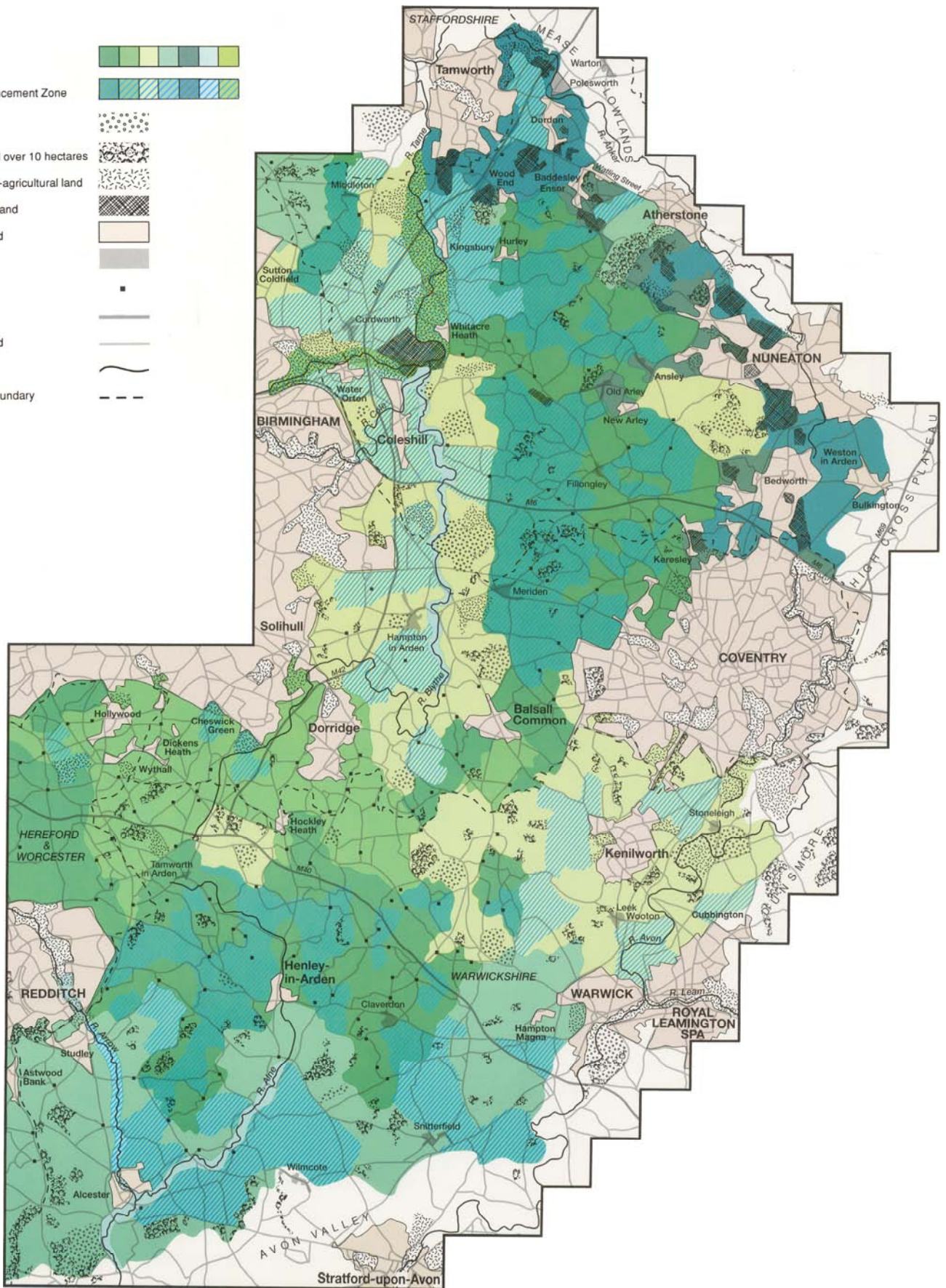
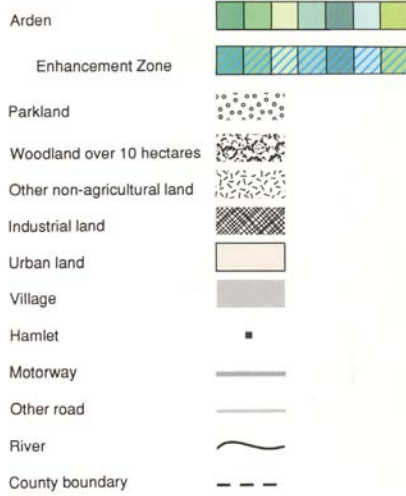
The booklets and their maps are available online at:

<http://www.warwickshire.gov.uk/web/corporate/pages.nsf/Links/3540D83DEF277C69802573FD0056C908>

Analysis was carried out comparing the mapped landscape character areas and their text description with the HLC material for those areas. Particular attention was paid to the human influences (historic environment) sections.

In general the HLC data goes a long way to supporting the key characteristics and descriptions of the areas identified in the Warwickshire Landscape Guidelines. There are some discrepancies highlighted below although these are mainly within the text and rarely with the mapped character areas. In fact the maps are very accurate and complement the HLC mapping well. It is recommended that they are digitised into a vector GIS layer as soon as possible. At present only raster images exist of the maps from the publications and this limits their wider use.

Arden:



Warwickshire Landscape Guidelines Map of the Arden Area.

The Arden area is split into 7 distinct areas:

- **Arden River Valleys:**
- **River Valley Wetlands**
- **Industrial Arden:**
- **Arden Parklands:**
- **Wooded Estate lands**
- **Ancient Arden**
- **Arden Pastures**

For each of these the characteristic features were compared to the HLC material for the same area

Arden River Valleys:

This area consists of the floodplains of the main river valleys (Blithe, Arrow, Alne and Cole)

HLC agrees with the characteristic features but there is very little information in the text about the historic landscape of this area.

River Valley Wetlands

This largely forms the Tame Valley wetland area.

HLC generally agrees with the characteristic features of this area.

There is a lot of industrial and extractive activity in this area and the wetlands have predominantly been formed from gravel extraction sites.

Industrial Arden:

The HLC only partially agrees with some of the characteristics for this area.

The landscape is a varied landscape of urban, industrial, coal mining, hard rock extraction, old common and heath.

The field pattern unfortunately is not identified in the guidelines for this area and despite the varied landscape it still retains a substantial portion of enclosed land.

Arden Parklands:

In general the HLC agrees with the characteristics identified for this area including the enclosure pattern, prominence of golf courses and the remnant deer parks of Stoneleigh and Packington.

However, most of the Solihull area is classified as Arden Parklands in the guidelines, although the historic landscape character points more to Ancient Arden or Arden pasture.

Wooded Estate Lands

HLC generally agrees with the characteristic features for this area.

However, the Middleton area in the north and the Merevale area appears to have a character closer to Arden Parklands rather than Wooded Estate Lands

The characterisation of Merevale as a Wooded Estate seems to be fair but it could equally be categorised as Arden parkland.

Ancient Arden

In general the HLC data agrees with the characteristics and area mapped, apart from the disconnected patch of Ancient Arden just west of Kenilworth.

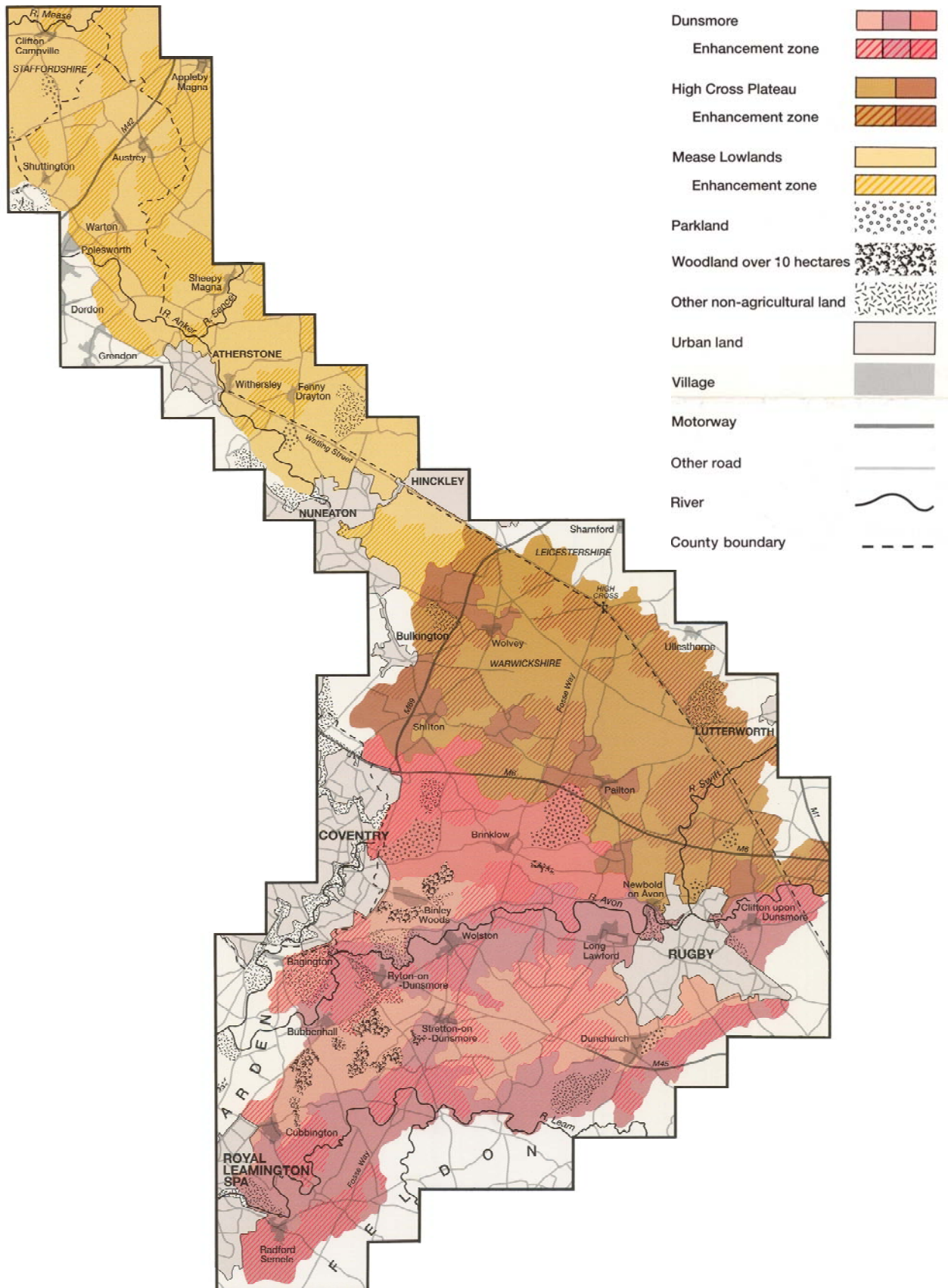
The southern section in particular matches an area of piecemeal enclosure identified from the HLC very closely.

However, there is less agreement with the northern section. It is felt from the HLC data that this has a different character with the field pattern in particular being very different, being formed mostly of irregular fields, with large amounts of post-war fields and more regular planned enclosure.

Arden Pastures

HLC generally agrees with the characteristic features and text for this area.

Dunsmore, High Cross Plateau and Mease Lowlands:



Warwickshire Landscape Guidelines Map of Dunsmore, High Cross Plateau and Mease Lowlands

Dunsmore is split into the following areas:

- Plateau farmlands
- Plateau Fringe
- Dunsmore Parklands

Plateau farmlands

HLC generally agrees with the characteristic features for this area.

One discrepancy, picked up by the HLC, is the large areas of sand and gravel extraction at Ling Hall and Bubbenhall impacting on the landscape although this is because this extraction work only really started after the Landscape Guidelines were published.

Plateau Fringe

HLC generally agrees with the characteristic features for this area.

The landscape has a very mixed character with poorly defined field patterns but more irregular and piecemeal than planned enclosure. Small nucleated villages form at the edge of the plateaux and the Rivers Avon and Leam influence this area strongly.

Dunsmore Parklands

HLC generally agrees with the characteristic features for this area.

However, only one park (Coombe Abbey) is still present in the area; the other, (Newbold Revel Park) is a relict park, as the fields are predominantly under agriculture.

High Cross Plateau:

- Open Plateau
- Village Farmlands

Open Plateau

HLC generally agrees with the characteristic features and text for this area.

The area has a large number of more recently created very large post war fields and consequently a very fragmented field pattern. Deserted villages are also a feature of this area

Village Farmlands

HLC generally agrees with the characteristic features for this area.

These areas form the main concentrations of piecemeal or irregular enclosure in this area with small nucleated villages.

Mease Lowlands:

- Estate Farmlands

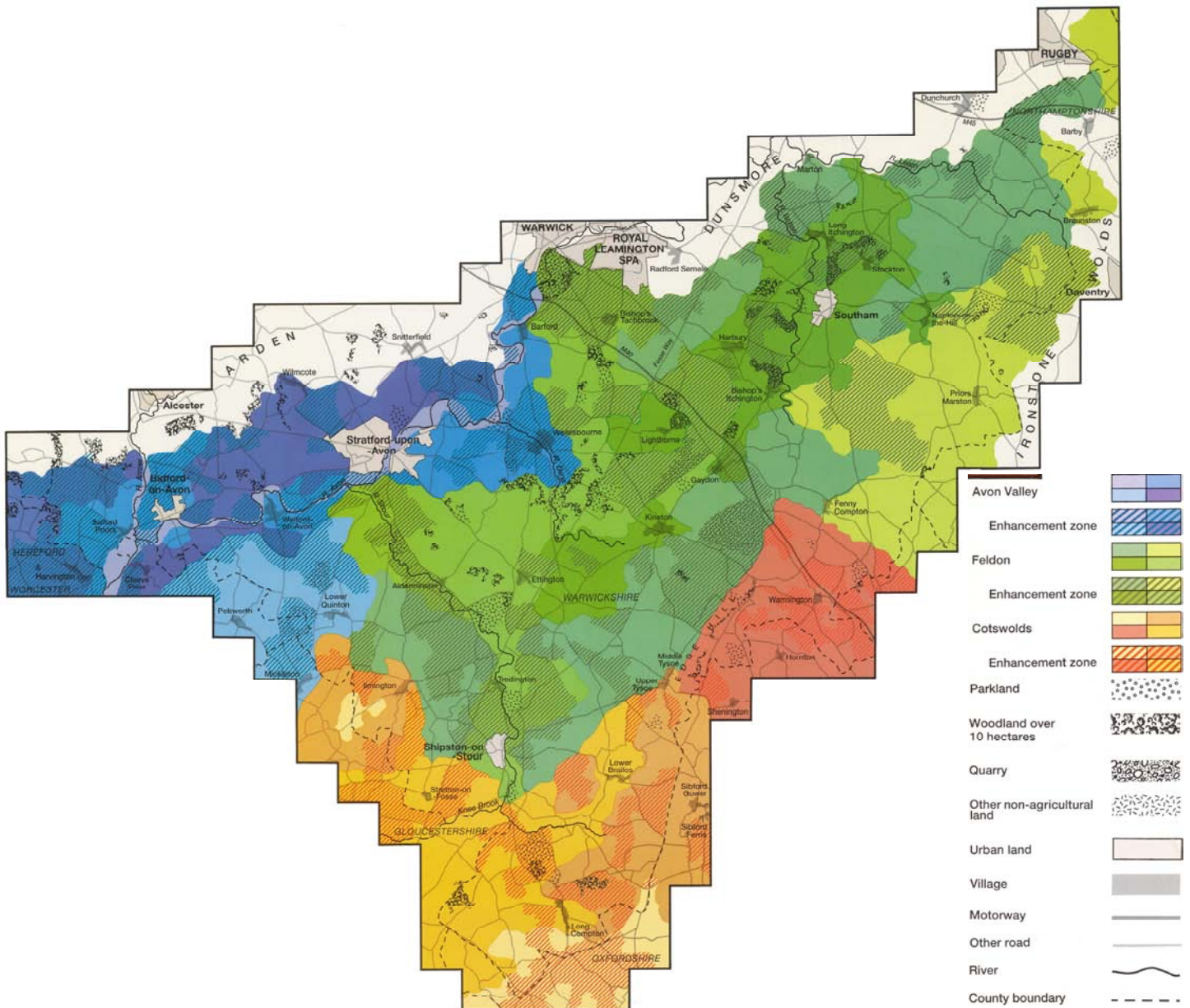
Estate Farmlands

HLC does not support all the characteristics identified for this area.

The field pattern is much more mixed, rather than the later planned enclosure described in the guidelines, although the small coverts are indeed a characteristic feature.

The settlement pattern is small nucleated villages among arable fields and so generally agrees with the Landscape Guidelines. There is also some parkland, although not as much as in other areas.

Avon Valley, Feldon and Cotswolds



Warwickshire Landscape Guidelines Map of the Avon Valley, Feldon and Cotswolds areas.

Avon Valley

- River Meadowlands
- Terrace Farmlands
- Vale Farmlands
- Vale Orchard Belt

River Meadowlands

HLC generally agrees with the characteristic features and text for this area.

This area essentially consists of the floodplains of the main rivers including the rivers themselves.

Terrace Farmlands

HLC does not support all the characteristics or text for this area.

The field pattern is more mixed rather than the purely 'geometric' field pattern indicated by the Landscape Guidelines.

Vale Farmlands

HLC generally agrees with the characteristic features and text for this area, but more information could have been included about the historic landscape.

Vale Orchard Belt

HLC generally agrees with the characteristic features and text for this area.

Feldon

- Ironstone Fringe
- Vale Farmlands
- Lias Village Farmlands
- Feldon Parklands

Ironstone Fringe

HLC generally agrees with the characteristic features for this area.

Although the text mentions 'Tudor enclosure' the HLC points more to later planned enclosure.

Vale Farmlands

The characteristics defined do not completely describe the character of this area effectively.

There is much more of a mix of field types with substantial amounts of planned, piecemeal and of very large post war fields.

There is also no mention of the huge impact of Defence Munitions Kineton on the landscape character of the area.

Lias Village Farmlands

HLC generally agrees with the characteristic features for this area.

However the field pattern appears to be more mixed rather than the small or medium sized fields noted in the Landscape Guidelines.

Feldon Parklands

HLC generally agrees with the characteristic features for this area.

There are a number of large estates with designed parks and this area is the most wooded area in Feldon.

Cotswolds (only part of the following two types are in the HLC area, the other two types are not covered by the present HLC project)

- Plateau Redlands and Edge Hill
- Cotswold Fringe

Plateau Redlands and Edge Hill

HLC generally agrees with the characteristic features for this area.

Cotswold Fringe

HLC generally agrees with the characteristic features for this area.

The fieldscape is largely regular planned enclosure with some patches of woodland and parks and very small villages.

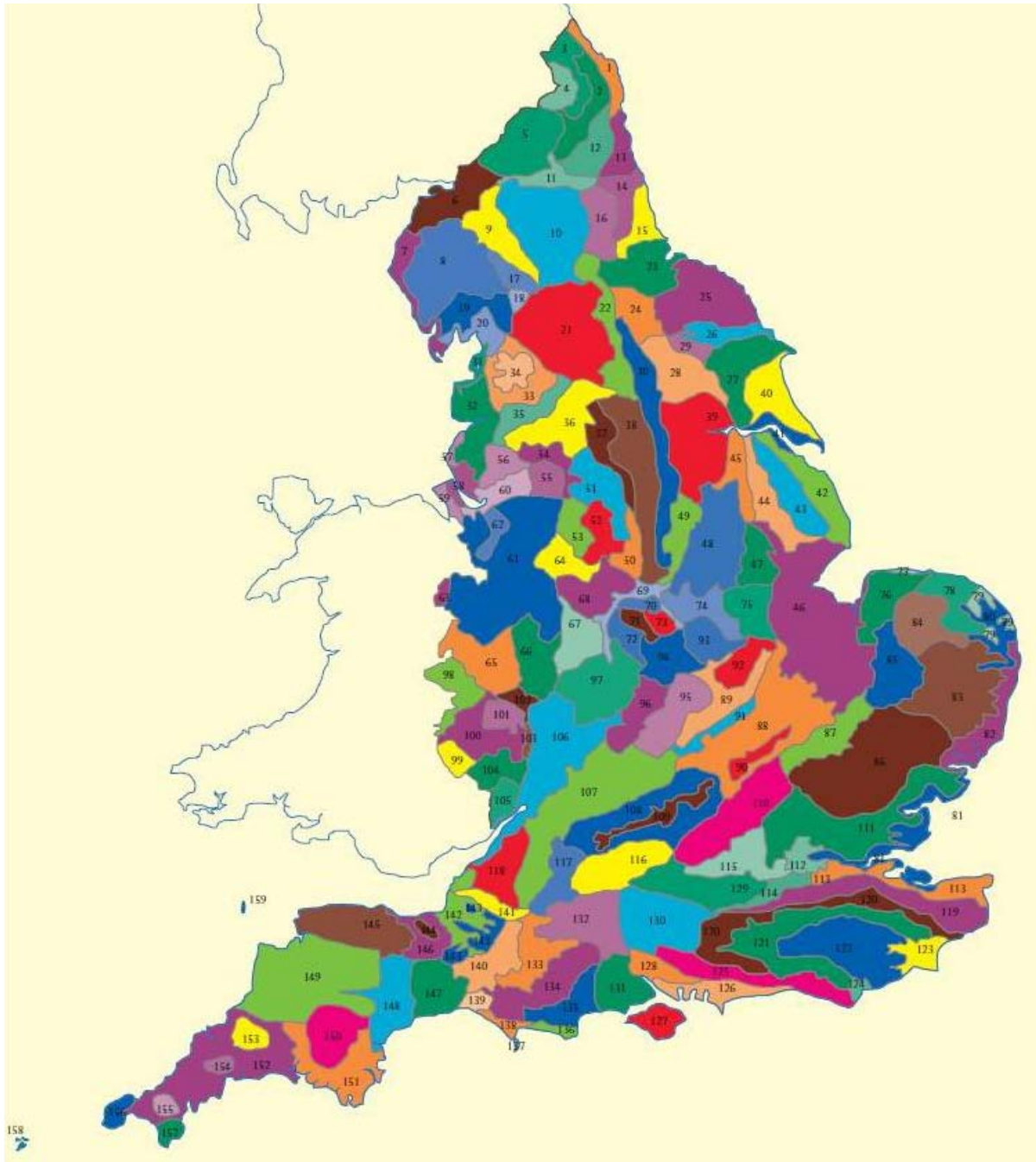
Conclusion

The Warwickshire Landscape Guidelines is a very useful piece of work that goes a long way to describing the character of the landscape in Warwickshire along with management recommendations. Despite the absence of HLC information, many of the distinctive elements of historic landscape character have been recognised and recorded. The management recommendations from the guidelines may need updating, although they appear to be generally as relevant today to modern landscape issues as they were previously.

One of the key tasks that could take place to ensure the survival of landscape characterisation in Warwickshire is to carry out an up-to-date Landscape Character Assessment using the Landscape Guidelines as a solid base and taking account of new information and sources such as the HLC and the Habitat Diversity Audit. This would ensure a continuity of use by local planning authorities who may consider the Landscape Guidelines as dated now that the project is over 20 years old and the published reports over 15 years old.

National Character Areas (NCAs)

These were previously called Joint Character Areas (JCAs) and are character areas representing the character of England's landscape, wildlife and cultural features at a national level. They were developed by the former Countryside Commission in 1996 (with input from English Nature and English Heritage) and updated in 2005 by Natural England with support from English Heritage.



Map of the National Character Areas in England

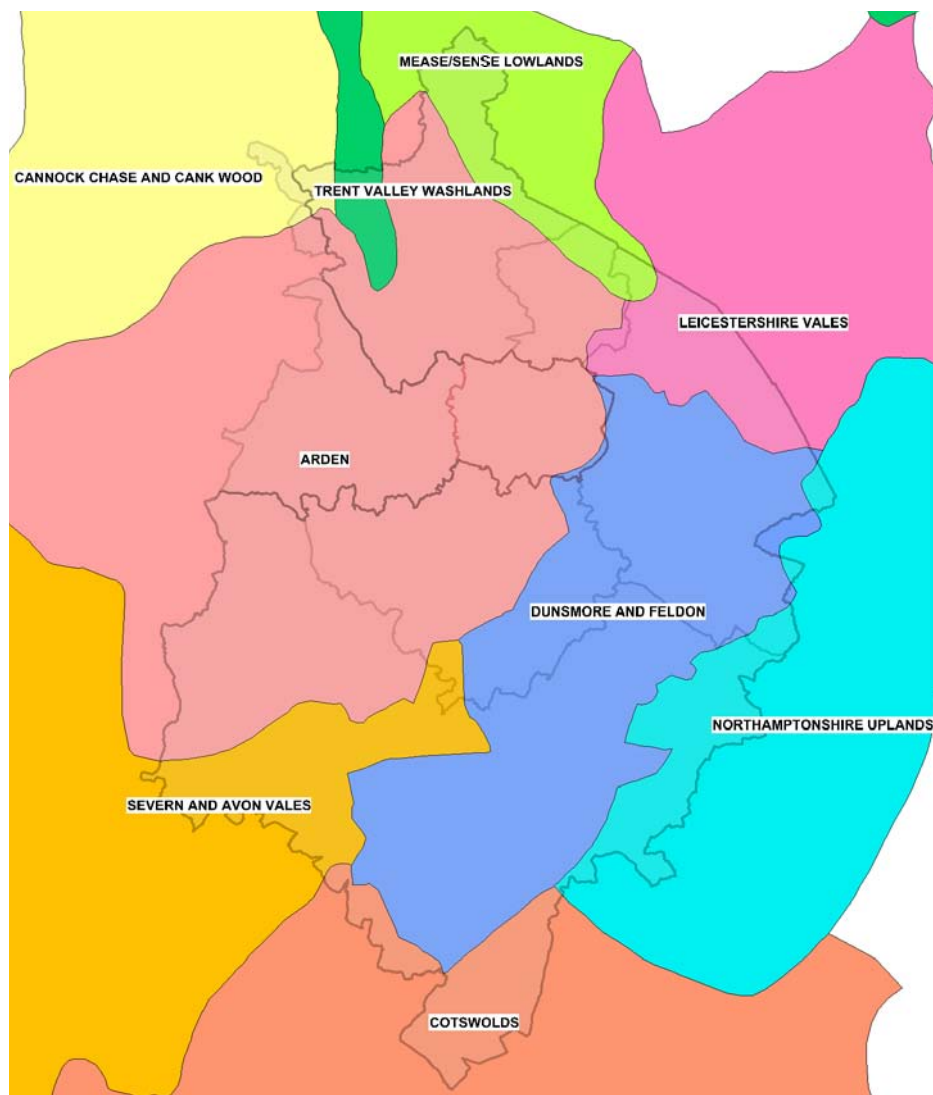
A set of eight regional volumes were published describing the 159 NCAs. These character descriptions of each NCA highlight the influences which determine the character of the landscape, for example land cover, buildings and settlement; they can be downloaded from the Natural England website:

(<http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx>)

The NCAs are a widely recognised national spatial framework, used for a range of applications. Examples include the targeting of Natural England's Environmental Stewardship scheme and the Countryside Quality Counts project.

Nine NCAs fall within the Warwickshire HLC project area. These are:

- Area 67: Cannock Chase and Cank Wood
- Area 69: Trent Valley Washlands
- Area 72: Mease/Sense Lowlands
- Area 89 + 94: Northamptonshire and Leicestershire Vales
- Area 95: Northamptonshire Uplands
- Area 96: Dunsmore and Feldon
- Area 97: Arden
- Area 106: Severn and Avon Vales
- Area 107: Cotswold's



Map of National Character Areas in Warwickshire

Of these areas 96 (Dunsmore and Feldon) and 97 (Arden) cover most of Warwickshire with the other NCAs only partly falling within the county and mainly lying in neighbouring areas.

Each of the NCAs for Warwickshire has been analysed briefly in terms of its key descriptions and the area it covers compared to the Warwickshire HLC material. For the Dunsmore and Feldon and Arden areas these have been analysed in more detail.

Below are the Key Characteristics from each NCA description with an analysis of how the HLC data compares to each NCA.

67. Cannock Chase and Cank Wood

The key characteristics of Cannock Chase and Cank Wood NCA are:

- Very varied landscape with a range of industrial, residential, agricultural and recreational land uses.
- Strongly contrasting settlement pattern with some areas densely populated, others unpopulated and 'wild'. Rounded central plateau, dominated by heathland and coniferous woodland.
- Sprawling coal mining settlements.
- Reclaimed and active open-cast coal sites and spoil tips from abandoned deep mines.
- Strong rectilinear pattern of parliamentary enclosure in some areas.
- Black Country with a mosaic of urban areas, former industrial land and patches of farmland.
- Extensive urban fringe.
- Open arable areas with low hedges.
- Areas of small hedged fields, scattered farmsteads and small holdings. Historic parks.
- Red-brick buildings
- Industrial archaeological features.

HLC Analysis and Comments:

There is very little of this NCA in the county and it does not really have a significant impact on the character of the county, however the HLC could perhaps add more information to define this area better.

69. Trent Valley Washlands

The key characteristics of the Trent Valley Washlands are:

- Flat broad valleys, contained by gentle side slopes, with wide rivers slowly flowing between alluvial terraces.
- Constant presence of urban development, mostly on valley sides, in places sprawling across the valley and transport corridors following the valley route.

- Contrasts of secluded pastoral areas, with good hedgerow structure, and open arable with low hedges.
- Strong influence of riparian vegetation, where rivers are defined by lines of willow pollards and poplars.
- Open character punctuated by massive cooling towers of power stations and strongly influenced by pylons, sand and gravel extraction, and roads.

HLC analysis and Comments:

Broadly the HLC agrees with the key characteristics of this NCA where it is found in Warwickshire. In particular sand and gravel extraction has indeed had an impact on the landscape and results in water filled pits along the Tame Valley. With reference to the power stations mentioned above there was also one in this area in Warwickshire at Hams Hall; this was one of the largest of its time in the country but has subsequently been replaced with a large distribution park and industrial estate.

72. Mease/Sense Lowlands

The key characteristics of the Mease/Sense Lowlands are:

- Gently-rolling landform of low rounded hills and valleys.
- Flat land along river valleys.
- Extensive, very open areas of arable cultivation.
- Strongly rectilinear hedge pattern of late enclosure, often dominating an open landscape.
- Tree cover confined to copses, spinneys, intermittent hedgerow trees and parks.
- Scattered large parks with imposing mansions
- Small red-brick villages, often on hilltop sites and with prominent church spires.
- Ridge and furrow and deserted settlements. Isolated 19th century farmsteads.

HLC analysis and Comments:

Broadly the HLC agrees with these key characteristics and with the boundary of this area; however, in terms of fieldscapes it is much more a mix of planned, piecemeal and very large fields, rather than very large open areas of later rectilinear enclosure.

The description of the settlement pattern for this NCA does not fit very well with the larger settlements in this part of Warwickshire such as Atherstone. Furthermore, ridge and furrow and deserted medieval settlements are not a dominant character of this NCA in Warwickshire.

The south-western edge of this NCA appears to be the geological formation of hard stone that has and continues to be extensively quarried in Warwickshire.

89+94. Northamptonshire and Leicestershire Vales

The key characteristics of the Northamptonshire and Leicestershire Vales are:

- Gentle clay ridges and valleys with little woodland and strong patterns of Tudor and parliamentary enclosure
- Distinctive river valleys of Soar, Welland and Nene with flat floodplains and gravel terraces.
- Large towns of Leicester and Northampton dominate much of the landscape.
- Frequent small towns and large villages, often characterised by red brick buildings.
- Prominent parks and country houses.
- Frequent imposing, spired churches.
- Attractive stone buildings in older village centres and eastern towns and villages.
- Great diversity of landscape and settlement pattern with many sub units, e.g. Nene Valley and Welland Valley.

HLC analysis and Comments:

Generally the HLC agrees with these key characteristics but it is felt that this area has a much more mixed character when compared to some other NCAs. Most of this NCA falls within Northamptonshire and Leicestershire and the characteristics do not appear to be very relevant to the Warwickshire landscape, however some characteristics like prominent parks and country houses and the lack of woodland are supported by the HLC.

95. Northamptonshire Uplands

The key characteristics of the Northamptonshire Uplands are:

- Rounded, undulating hills with many long, low ridgelines.
- Abundant and prominent ridge and furrow with frequent deserted and shrunken settlements.
- Sparse settlement of nucleated villages on hilltops or valley heads.
- Mixed farming: open arable contrasts with pasture enclosed by good hedges with frequent hedgerow trees.
- Wide views from the edges and across the ridgetops.
- Straight, wide, enclosure roads, often following ridges.
- Little woodland, but prominent coverts on higher ground.
- Ironstone and limestone older buildings with a transition across the area. Brick buildings in some villages.
- Great variety of landform with distinctive local features like Hemplow Hills.
- Large and nationally-important historic parks.

HLC analysis and Comments:

The HLC agrees very strongly with the key characteristics for this NCA as well as the borders and limits that define it.

96. Dunsmore and Feldon

This description comprises two sub-character areas: Dunsmore and Feldon.

Key Characteristics of the NCA**Dunsmore:**

- Farmland with large geometric fields divided by straight hedges with many hedgerow trees.
- Generally well-wooded appearance but also extensive open arable farmland.
- Heathland character still evident in woodland clearings and roadsides.
- Plateau landscape of open, flat, rather empty character, with long views.
- Plateau fringes more enclosed, with rolling landform and woodland more dominant.
- Large ancient woodlands of high nature-conservation value in the west.
- Strong urban influence in some areas.

Feldon:

- Gently undulating landscape of low hilltops and clay vales.
- Large, open, regular or rectilinear fields with few woodlands.
- Abundant pasture, often with ridge and furrow.
- Strong contrast with the more wooded, complex landscape of neighbouring Arden.
- Small, nucleated villages with buildings in red brick, often with decorative ironstone edging, or in Lias limestone.
- Narrow river valleys.
- Several subdivisions including the smaller-scale, more wooded landscape to the west, with parks and large estates.

HLC analysis and Comments:

Although the HLC correlates strongly with the broad description and characteristics of this NCA it is felt that there are actually three distinct areas here; The Dunsmore plateau, the upper Feldon (in the south towards the Cotswolds) and the lower Feldon (to the north towards Dunsmore). However the description of this NCA especially in terms of the historic landscape character is still very good. Below are the key characteristics picked up by the HLC relating to the previously identified three areas.

Upper Feldon:

- Dominated by planned enclosure and rectilinear fields with straight boundaries. There is a moderate amount of piecemeal enclosure in patches throughout the area and a small amount of post-war very large fields.
- Large designed landscapes with country houses in this area such as Ettington, Compton Verney and Walton.
- The military base of DM Kineton has had a large landscape impact and affects the character of the area.
- Some industry in the area with Gaydon Motor Test Track and facilities dominating.
- Small amounts of woodland with some larger patches to the west.
- Small nucleated villages with medieval origin and isolated farms most pre 1880s.
- Large areas of ridge and furrow.

Lower Feldon

- Much more of a riverine landscape than the upper Feldon with the rivers Leam and Avon dominating.
- More piecemeal enclosure, less planned and generally more very-large post war fields.
- More patches of larger woodland.
- Transport corridors taking advantage of the lower landscape such as motorways, canals and railways.
- Warwick and Leamington are the dominating settlements, with other smaller towns and large nucleated villages.
- Large areas of ridge and furrow

Dunsmore

- Mostly irregular fields with some piecemeal, quite a lot of very large post-war fields and a few small patches of planned enclosure.
- Large patches of woodland mostly in the west of this area.
- Some large designed landscapes with country houses.
- Some extractive industry and other industrial sites mostly in and around Rugby
- Settlement dominated by Rugby with small villages scattered throughout the rest of the area.

97. Arden

The key characteristics of the Arden countryside are:

- Well-wooded farmland landscape with rolling landform.
- Ancient landscape pattern of small fields, winding lanes and dispersed, isolated hamlets.
- Contrasting patterns of well-hedged, irregular fields and small woodlands interspersed with larger semi-regular fields on former deer parks and estates, and a geometric pattern on former commons.
- Numerous areas of former wood-pasture with large, old, oak trees, often associated with heathland remnants.
- Narrow, meandering river valleys with long river meadows.
- North-eastern industrial area based around former Warwickshire coalfield, with distinctive colliery settlements.
- North-western area dominated by urban development and associated urban edge landscapes.

HLC analysis and Comments:

This large area could be subdivided into different parts but in general the NCA description is very good and reinforced by the Warwickshire HLC.

However, it is worth mentioning that deer parks were once a common feature of this area and that it still contains a large amount of designed landscapes relating to historic country houses and more modern recreation facilities such as golf courses.

The other key character of the area in the very north of the Arden is the Warwickshire Coalfield, which has shaped the landscape and its use and exploitation greatly in the North Warwickshire and Nuneaton and Bedworth area.

106. Severn and Avon Vales

The key characteristics of the Severn and Avon Vales are:

- Diverse range of flat and gently undulating landscapes, united by broad river valley character.
- Riverside landscapes with little woodland, often very open. Variety of land uses from small pasture fields and commons in the west to intensive agriculture in the east.
- Distinct and contrasting vales: Evesham, Berkeley, Gloucester, Leadon, Avon.
- Many ancient market towns and large villages along the rivers.
- Nucleated villages with timber frame and brick buildings.
- Prominent views of hills - such as the Cotswolds, Bredon and the Malverns - at the edges of the character area.

HLC analysis and Comments:

The HLC agrees very strongly with the key characteristics for this NCA.

The more descriptive text (not shown) refers to orchards which make up part of the distinctive character of this area in Warwickshire.

The NCA description also picks up the diversity in the different vales of Evesham, Berkeley, Gloucester, Leaden and Avon and the HLC would support this in terms of the Avon valley landscape. Perhaps there should be a NCA for each vale and it may be worth considering extending the NCA area to include the Avon valley up to Rugby.

107. Cotswolds

The key characteristics of the Cotswolds are:

- Defined by its underlying geology: a dramatic scarp rising above adjacent lowlands with steep coombes, scarp foot villages and beech woodlands.
- Rolling, open, high wold plateaux moulded by physical and human influences, with arable and large blocks of woodland, divided up by small, narrow valleys.
- Incised landscapes with deep wide valleys.
- Flat, open dip slope landscape with extensive arable farmland.
- Prominent outliers within the lowlands.
- Honey-coloured Cotswold stone in walls, houses and churches.
- Attractive stone villages with a unity of design and materials.

HLC analysis and Comments:

Most of this NCA falls within the Cotswolds AONB in Warwickshire and this area has not been part of the Warwickshire HLC project. The small areas in Warwickshire that are covered mainly consist of planned enclosure with small isolated pre-1880s farms.

Conclusion about NCAs

Some of the text and historic/cultural section is very well assessed and holds true with the historic landscape character but in other areas HLC could have an influence in more accurately describing the landscape character and add significantly to the Historic section of the NCA descriptions.

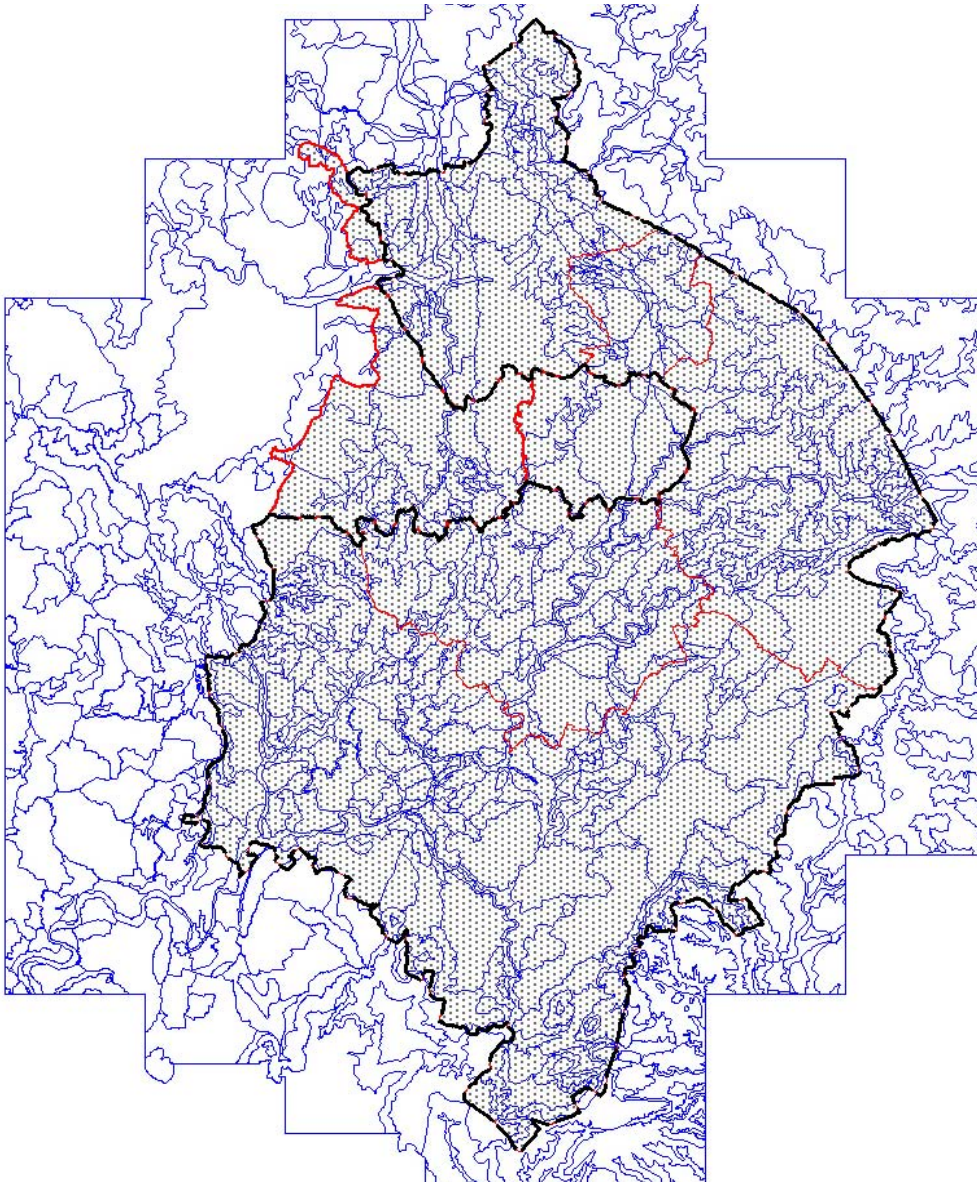
The text sections for the NCAs relevant to Warwickshire appear to have been derived from the Warwickshire Landscape Guidelines with minimal re-writing, especially the human influences (historic/cultural) section. This may explain the discrepancy between those wholly in Warwickshire and those with just a small amount in Warwickshire

Some of the borders of the NCAs are not fixed to actual boundaries. Some work could be done to make them more accurately fit the changes in the historic landscape, because some of the changes in HLC are not obvious between one NCA and another. Natural England do recognise though that the boundaries of the NCAs are “not precise and that many of the boundaries should be considered as broad zones of transition.”

Landscape Description Units

Landscape Description Units (LDUs) were developed in Warwickshire in the 1990s by Steven Warnock as part of the Living Landscapes Project. LDUs are polygons with associated data that are drawn forming relatively homogenous units of land, each defined using a series of six key characteristics relating to geology, topography, soils, tree cover character, land use and historic settlement pattern. Field survey provides the opportunity to record the visual and sensory information. All information at each scale, from the desk study as well as all field survey data, is recorded in the landscape database, and linked to the LDU polygons in a GIS.

There are three different levels of detail of LDUs from Level 1 (regional/national), Level 2 (county) through to 3 (local/individual land parcels). LDUs have developed over time and derived many datasets from its research activities including more recently HLC data, for example in Shropshire with the Landscape Character Assessment; however the Warwickshire HLC data has yet to be used to inform the LDUs in this way. Consequently in Warwickshire LDUs are only at Level 1 and Level 2.



Level 2 Landscape Description Units in Warwickshire

A very brief level of analysis was carried out using HLC and LDU data for Warwickshire.

It was discovered that the LDU polygons rarely match those of the HLC exactly. Some LDUs match very closely such as floodplain and rivers, others not so well. The LDU resolution is not as fine grained as the HLC and the LDU polygons also, as expected, tend to follow more geological and physiological features rather than historic or human landscape features.

When looked at in a very broad sense some very general patterns match between the LDU and HLC data.

For example the woodland cover from the LDUs is quite accurate and matches with the HLC data, probably because they are based on similar baseline datasets.

Larger settlement areas also match well between the data-sets; however, the LDUs only show at a broad level the dominant and secondary type in the landscape so the smaller towns and large villages are not recorded in LDUs especially larger settlements. Some of the urban areas in the LDUs also need updating to reflect modern settlement expansion and change.

The problem seems to be that to incorporate all the different elements of physiography, ground type, landcover and cultural pattern means making compromises with one or all of them. Not all of them fit together. The first three can possibly fit well to each other but the cultural or historic landscape does not always match well.

A recommendation of the Warwickshire HLC project is that an enhanced level 2 mapping exercise should take place using the HLC data to update and complement LDU areas. The methodology has already been developed in Shropshire and this could help make the LDUs a more accepted form of landscape description for use by local planning authorities, national agencies and all those involved in landscape management.

HLC analysis compared with other data sets

British Geological Survey Data (BGS)

For a summary of the geology of Warwickshire with geological maps see Chapter 1 (Introduction).

The paper and digital data from the British Geological Survey was analysed in a very broad sense against HLC data to see if particular patterns emerged and the context to which historic landscape character is influenced by underlying geology.

Bedrock Geology:

In general hard rocks match well with HLC Extraction types but other patterns emerge for particular groups of bedrock geology.

Mercia Mudstone

These areas appear to have more woodland and larger settlements such as Warwick, Kenilworth and Rugby.

Dyrham Formation (Siltstone and Mudstone, Interbedded)

Irregular fields appear to match quite well with this type.

Designed landscapes fit well with Saltford Shale Member (Mudstone), Langport Member (Limestone), Penarth Group (Mudstone) and Rugby Limestone (Limestone). This may be because of the use of these types of stone for country houses and estates.

These geological types also of course tie in with the cement works near Rugby and Southam.

The No Mans Heath area to the north of the county has a very different Historic Landscape Character compared to other areas and this may be because of the underlying geology of Bromsgrove Sandstone.

The Warwickshire Coal Seams and their subsequent development and exploitation by humans are of course directly related to the geology of the area in the north of Warwickshire.

Fieldsapes also strongly correlate with the geological change in bedrock between the Blue Lias and the Mercia Mudstone with the predominantly wooded Penarth and Blue Anchor formation forming a sinuous band in between these two areas.

Superficial Geology:

Alluvium

This generally reflects the floodplain type identified by the HLC apart from some alluvium around Austrey, which appears to have previously been meadow land and which has subsequently been drained.

This geological layer also ties in with sand and gravel extraction such as in the Tame Valley

Sand and Gravel and River Terraces 1-4

Settlements, including historic cores and modern expansion, fit very well onto the sand and gravel geology, for example at Alcester, Bidford, Welford, Stratford, Warwick, Wasperton, Barford, Hampton Lucy and Leamington.

As expected sand and gravel extraction also matches well with this layer.

Dunsmore Gravel

Rugby town has expanded largely on to this area and occupies most of the rest of what was Dunsmore Heath. The small area to the north of Rugby used to form Wolvey Heath with the settlements of Bulkington and Wolvey.

Till

No real pattern exists with this type but generally there is more woodland on these areas as well as more piecemeal enclosure

Oadby Member

No particular pattern is identified in the HLC. There is a mix of enclosure types including planned and piecemeal enclosure.

Conclusion

More work could be carried out comparing geology with HLC data but this may need the assistance of a geologist and may need more work on previous HLC patterns rather than just the present landscape. There is no doubt that some HLC types will relate to the underlying geology much more than others. Extraction HLC Types is one obvious example but others such as settlement and some fieldscapes also relate to the soils and the underlying geology.

Habitat Biodiversity Audit (HBA)

The Habitat Biodiversity Audit (HBA) was established in October 1995 through a funding partnership of all the local authorities in the sub-region of Warwickshire, Solihull and Coventry as well as other bodies such as English Nature, the Environment Agency and the Warwickshire Wildlife Trust. The role of the project has evolved with time but essentially is to provide accurate, up-to-date and readily accessible ecological data to all the project partners and to other users.

A series of habitat types is used to map the biodiversity of Warwickshire. Apart from the obvious fact that these types relate to natural landscape features rather than historic they are also, unlike HLC types, agreed on a national basis including the colours used to represent the types on the maps.

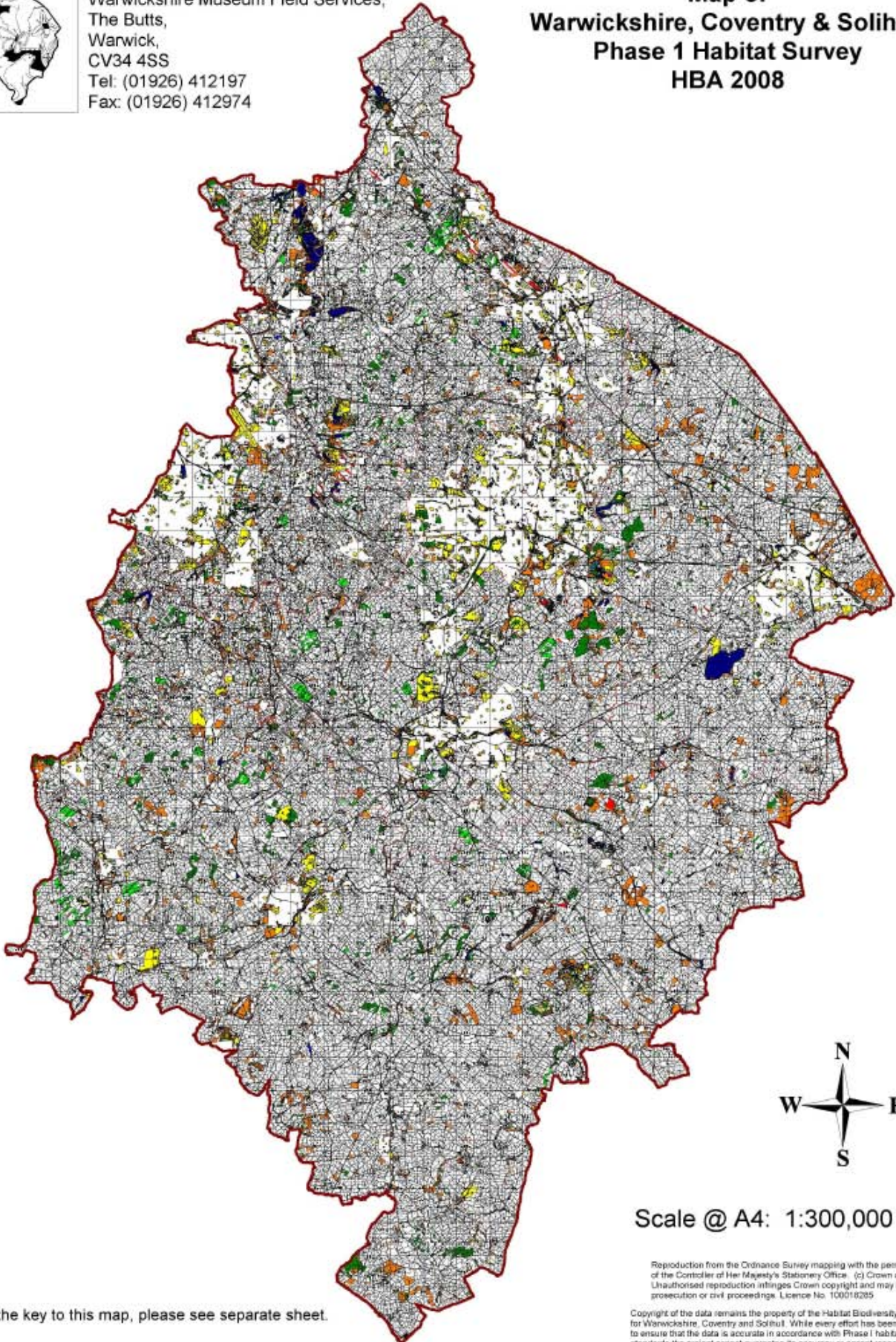
The HBA dataset was used as one of the baseline datasets for HLC digitising and record creation. Here the HBA is analysed in a very broad sense with the HLC data.

The immediate difference between the two datasets is that the HBA has been recorded to a much finer grain. Not only are visible landscape features recorded, but parts of those features, such as a corner of a field that has a different habitat to the rest, are also mapped. Field boundaries are also recorded as linear features whereas the HLC looks at discrete recognisable mappable areas rather than their constituent parts



HABITAT BIODIVERSITY AUDIT
Warwickshire Museum Field Services,
The Butts,
Warwick,
CV34 4SS
Tel: (01926) 412197
Fax: (01926) 412974

**Map of
Warwickshire, Coventry & Solihull
Phase 1 Habitat Survey
HBA 2008**



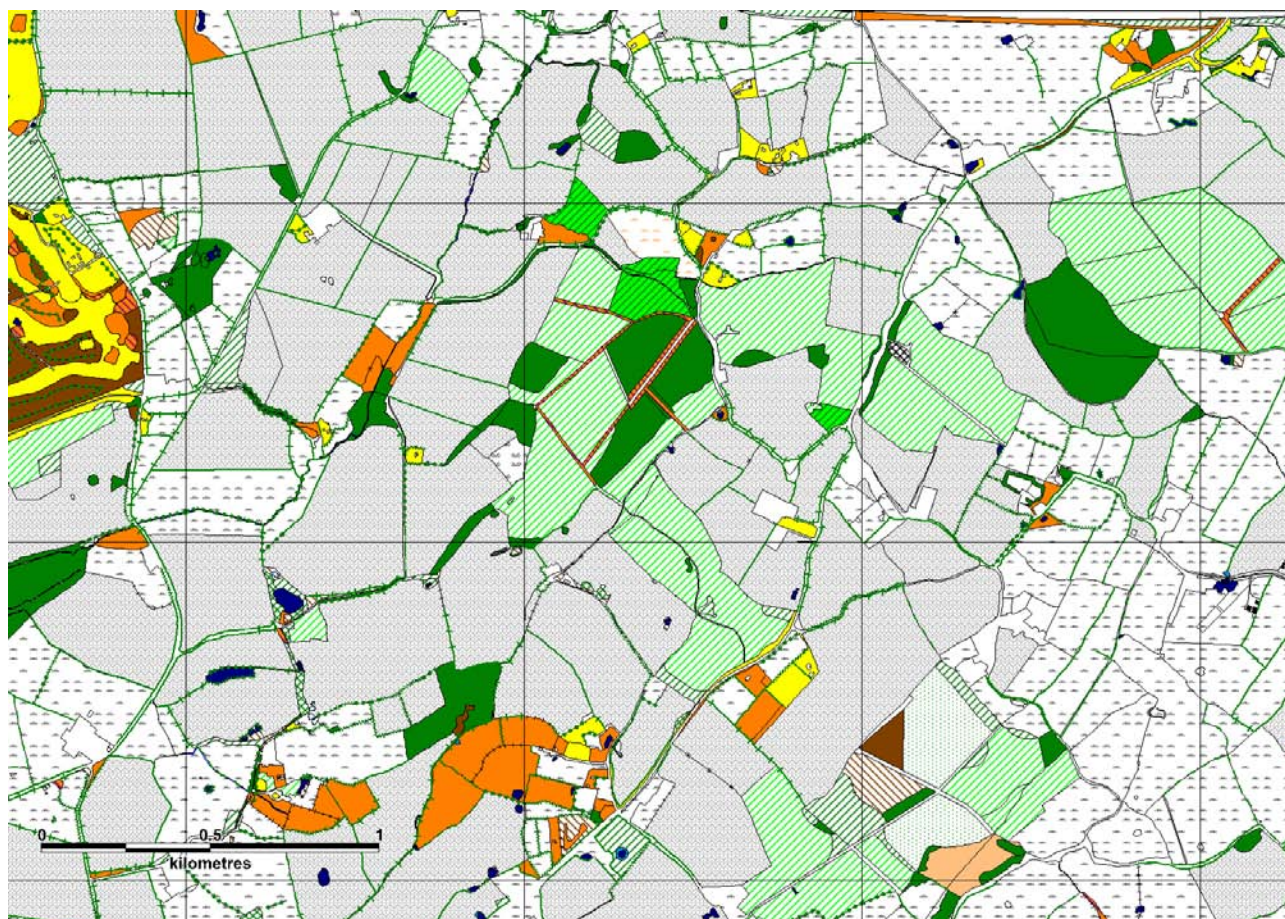
Scale @ A4: 1:300,000

For the key to this map, please see separate sheet.

Created on 7th September, 2009 by KRM

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Sample area showing detail from the HBA at Kinwalsey, North Warwickshire

Key to "Map of Warwickshire, Coventry & Solihull
Phase 1 Habitat Survey HBA 2008"

Phase I Habitat Survey

Habitat Types

A111 (Broad-leaved semi-natural woodland)	C32 (Non-ruderal)
A112 (Broad-leaved plantation)	D5 (Dry heath/acid grassland mosaic)
A121 (Coniferous semi-natural woodland)	E21 (Acid/neutral flush)
A122 (Coniferous plantation)	E31 (Valley mire)
A131 (Mixed semi-natural woodland)	E32 (Basin mire)
A132 (Mixed plantation)	F1 (Swamp)
A21 (Dense/continuous scrub)	F22 (Inundation vegetation)
A22 (Scattered scrub)	G1 (Standing water)
A31 (Broad-leaved parkland/scattered trees)	G2 (Running water)
A32 (Coniferous parkland/scattered trees)	I21 (Quarry)
A4 (Recently felled woodland)	I22 (Spoil)
A5 (Orchard (commercial))	I23 (Mine)
B11 (Unimproved acidic grassland)	I24 (Refuse tip)
B12 (Semi-improved acidic grassland)	J11 (Arable)
B21 (Unimproved neutral grassland)	J112 (Allotments)
B22 (Semi-improved neutral grassland)	J113 (Set-aside)
B31 (Unimproved calcareous grassland)	J12 (Amenity grassland)
B32 (Semi-improved calcareous grassland)	J13 (Ephemeral/short perennial)
B4 (Improved grassland)	J14 (Introduced shrub)
B5 (Marsh/marshy grassland)	J36 (Buildings)
B6 (Poor semi-improved grassland)	J4 (Bare ground)
C11 (Continuous bracken)	K (Unclassified)
C31 (Tall ruderal)	

Boundaries

Warwickshire, Coventry & Solihull
Districts & Boroughs

Urban areas which rarely have many habitat types are recorded in more detail in the HLC than the HBA, which only record major habitat types. Gardens are not recorded by the HBA and this could be one enhancement suggestion for the HBA, a Garden Habitat Type.

Woodland is one area where the HBA and HLC vary, especially in the fine detail. It appears that in some cases the HBA is more accurate in the representation of the woodland and in others the HLC. The HBA could use HLC data to cross check their woodland data.

Other benefits that the HBA could gain from HLC is the addition of a time depth element to their data, for example by describing previous habitat type in order to create a habitat history and thus have a clearer idea of how it might be managed in the future. It might also be used to establish how old a habitat, such as heathland or woodland, might be.

Another difference between the two data sets is that actual boundaries are recorded by the HBA rather than joining adjacent HLC polygon areas across minor landscape features such as roads.

In conclusion the HBA presents a more detailed, though also more partial representation of one aspect of the world whereas HLC considers the time depth element of landscape character in a more general way. Both can benefit from using each other as a baseline data set when updating takes place.

Historic Environment Record (HER)

As part of the countywide analysis the Warwickshire and Solihull Historic Environment Records were analysed looking at a small sample of archaeological monument types consisting of:

- **Ridge and Furrow**
- **Brickworks**
- **Deer Parks**
- **Military Sites**

Ridge and Furrow

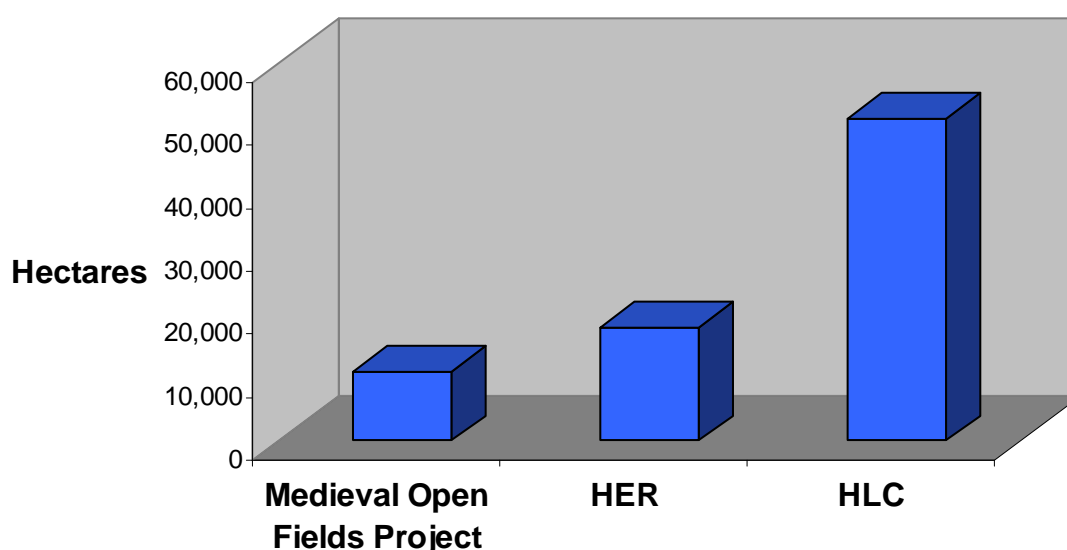
51,283 hectares are recorded in Warwickshire as Medieval Open Fields as Previous HLC Types (2369 Records forming 24% of the total project area and 12 % of the total records).

10,982 hectares are recorded in Warwickshire and Solihull from the Ridge and Furrow GIS layer from the Midland Open Fields project. This only shows extent ridge and furrow recorded in the 1990s and not the previous extent of ridge and furrow.

7,500 hectares of ridge and furrow are recorded as monuments in the Warwickshire HER. However, a large part of this area is in the Cotswolds AONB, derived from NMP data, and some of this will overlap with the Midlands Open Fields data.

More ridge and furrow data is visible in the detailed NMP work that forms part of the HER, but unfortunately this is difficult to extract to show distribution of ridge and furrow and to calculate the area covered.

For the purposes of comparisons with the HLC data the HER records a maximum of around 18,000 hectares of ridge and furrow in total.



The HLC project has therefore potentially almost trebled the evidence for ridge and furrow/medieval open fields in the county in terms of visibility on the HER. Other

studies, such as the Plotting Medieval Landscapes Project in Warwickshire funded by the RCHME in the 1980s and 1990s, have shown that Warwickshire used to have a ridge and furrow coverage perhaps even more than that recorded by the HLC but this data is predominantly in a paper format and not complete for the county as a whole.

The reason that the HLC records much more former open field data is that it records any evidence of current or previous use of the land as ridge and furrow using modern aerial photos, present or previous fieldscape types and field boundary morphology such as reverse 'S' curves and dog-leg boundaries.

There are some limitations to this though. For example, some larger HLC areas are included where only a part of the field may have evidence of ridge and furrow or piecemeal enclosure. The field could not have been split into smaller polygons because of a lack of modern boundaries.

Brickworks:

The Warwickshire HER has 105 records marked as brickworks and 142 records with 'Brick' in the record name.

The HLC records 125 brick works.

The HER has sites that are not recorded on the HLC and vice versa. It is increasingly apparent that they can both complement each other and that both should be used if investigating particular monuments or archaeological sites.

Deer Parks

The HER records 41 deer parks (38 are mapped) whereas the HLC records 31 distinct deer parks from 334 records.

Although this is not an increase in sites the HLC will enable better mapping of previous deer park boundaries and provide a landscape context for these types.

Military sites

The HER has identified a large number of military sites in Warwickshire including bombing decoys, anti-tank sites, pill boxes, RAF airfields etc. Most of this information has been assimilated from the Defence of Britain project.

The HLC has identified further military sites from the OS 1955 mapping showing previously unrecorded temporary camps and military features.

Other uses of HER data

There are other areas of the HER where the HLC has enhanced the record such as:

- Canals
- Railways (including dismantled railways)
- Industrial sites (mostly modern and late 19th C)
- Historic Farmsteads (with even greater detail to follow in a regional historic farmsteads characterisation project)
- Detail of settlements in the 20th century including historic cores
- Historic parks and country houses

- Commons
- Common Grazed Woodland
- Water meadows

Conclusion

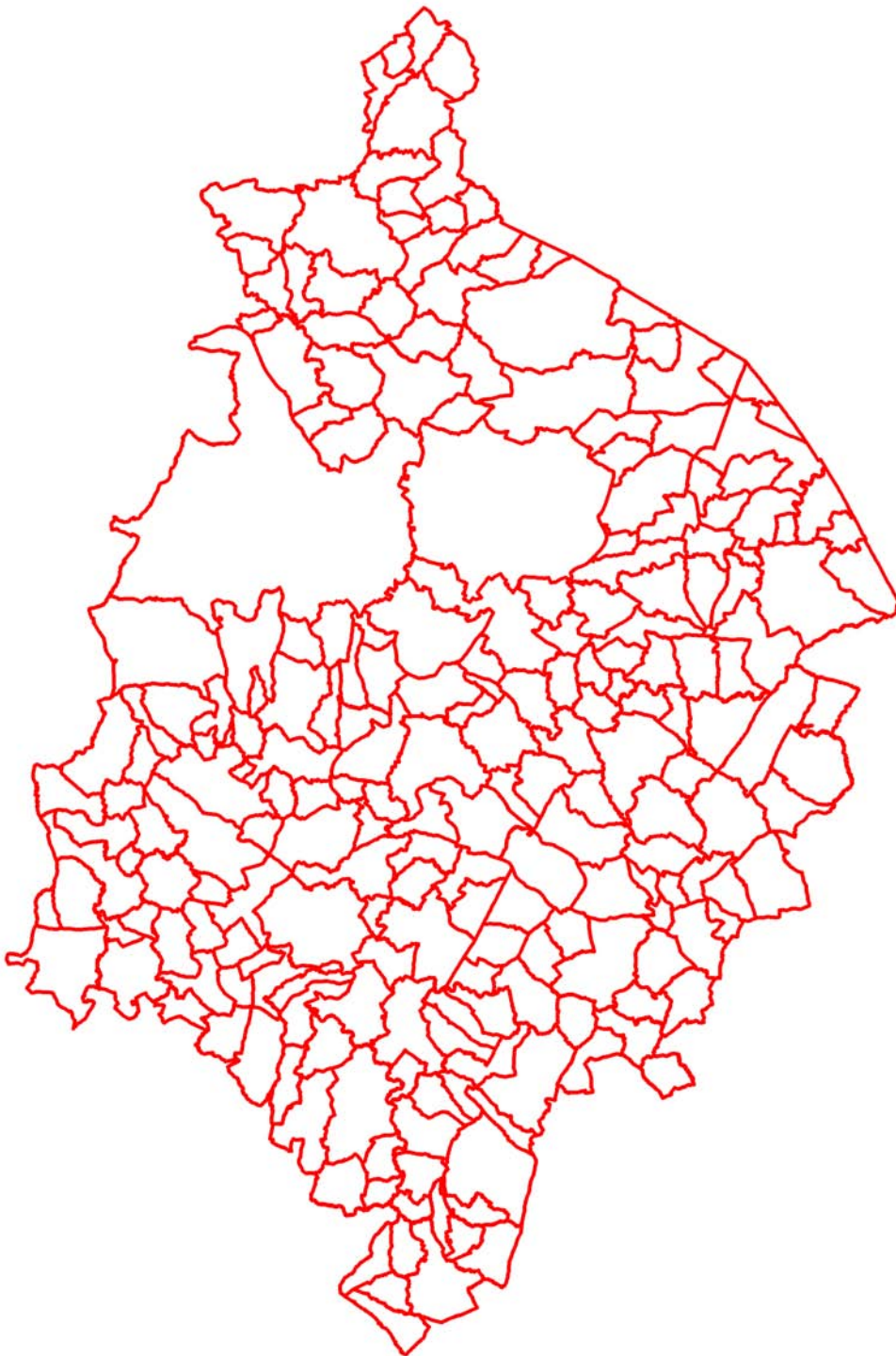
This brief analysis of the HLC with the HER has shown that the HLC can fill in many of the gaps in the HER including certain monument and landscape types. It is also clear that any integration into the HER should take account of both monument and HLC data.

HLC compared with defined boundaries and areas

A number of distinct administrative areas could be used for analysis with the HLC.

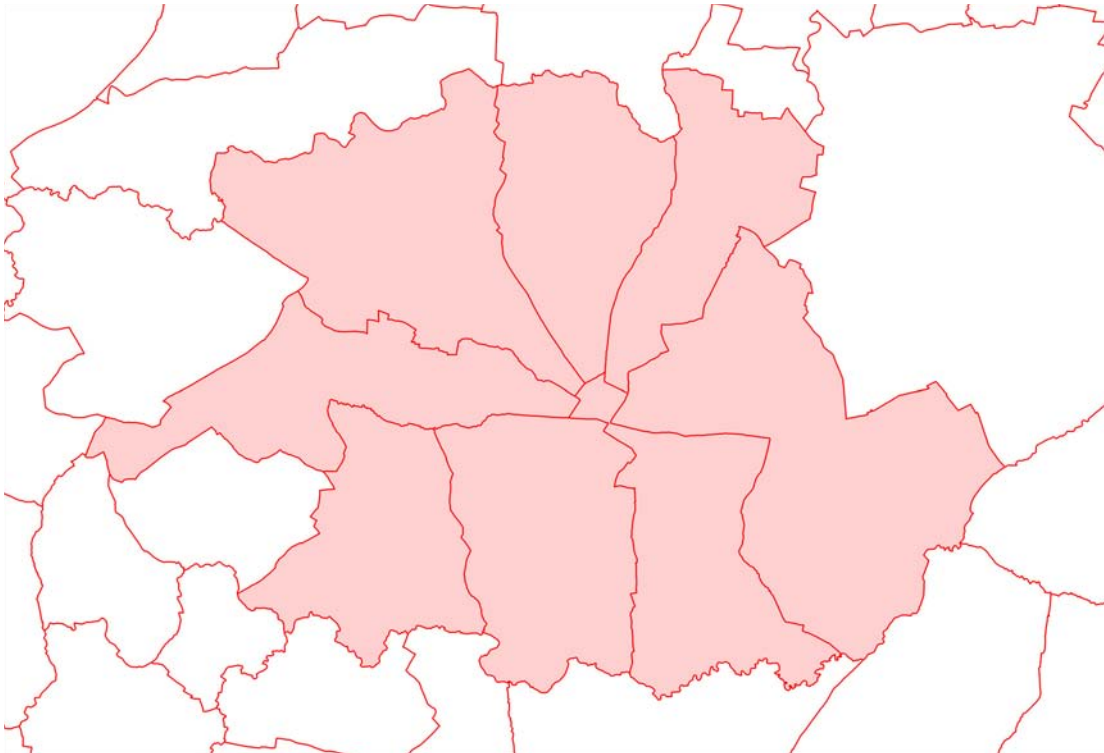
Parishes

Parishes are probably the most obvious administrative area to be used for analysis using HLC data. Most parishes and their formation date back to the medieval period, if not earlier and may have equally shaped or have been shaped by the landscape around it.



Map showing current parish boundaries in Warwickshire

Some distinctive patterns of parishes can be seen in the county such as at Dunsmore in Rugby Borough. Here the pattern of parishes radiates outwards from a central point in the middle of the Dunsmore Heath area.



Parish boundaries radiating out from Dunsmore Heath

The reason for this has been highlighted by Hooke (Warwickshire County Council 1993a) and others who suggest that the parishes represent equitable sharing of the different economic potential of different types of landscape. Each parish was laid out to include an area of heath/common, an area close to a main river or brook, an area of arable or pastoral land and probably an area of woodland

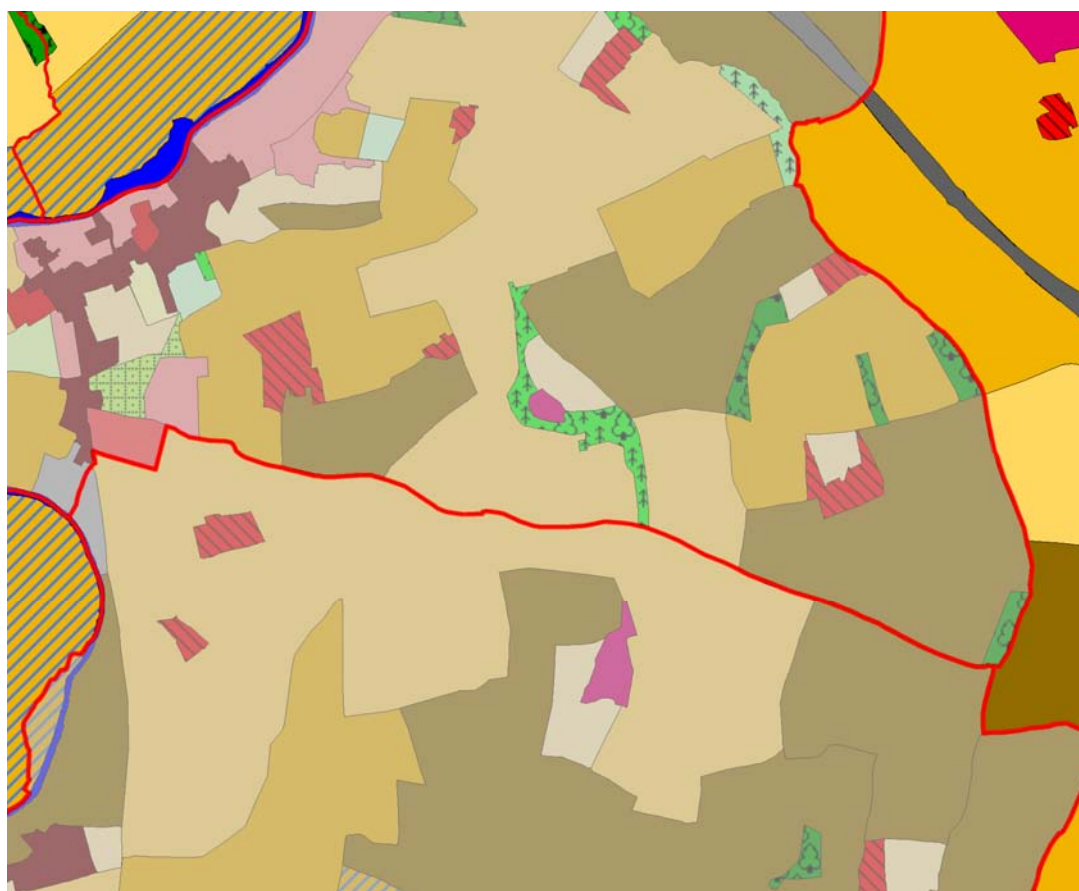
Interestingly, the later prehistoric landscape of Dunsmore appears to exhibit a similar radial patterning, with Iron Age pit alignments revealed in the extensive excavations at Ling Hall Quarry, Church Lawford, converging upon a single point (Palmer, 2002 and Palmer forthcoming).

Other parish boundaries in the county are concurrent with the Watling Street and Fosse Way Roman Roads.

Parish boundaries often follow main rivers while some follow ridge ways and routes across the higher part of the surrounding landscape such as at Aston Cantlow, Bearley, Snitterfield and Old Stratford parishes.

Later subdivisions of parish boundaries can show up clearly in the HLC where field patterns and other landscape patterns cross parish boundaries and appear to be older landscape features. A good example of this can be seen in the parish boundary between Wasperton and Barford where continuous piecemeal enclosure and field

boundaries are cut by the later parish division. It is likely that these two parishes once formed one larger administrative area, possibly even with neighbouring Charlecote parish.



HLC Types									
	Heathland		Woods with Sinuous Boundaries		Derelict Industrial Land		Country House		Park and Ride
	Commons		Broad Leaved Plantation		Coal Extraction		Farm Complex		Canal
	Scrubland		Mixed Plantation		Sand and Gravel Extraction		Mobile Home Park		Municipal and Civic
	Squatter/Encroachment Enclosure		Coniferous Plantation		Hard Rock Extraction		Park/Garden		Exhibition/Conference Centre
	Floodplain and Meadow		Natural Open Water		Clay Extraction		Golf Course		Camping/Caravan Site
	Water Meadow		Artificial Body of Water		Cement Works		Cemetery		Commercial and Retail
	Irregular (piecemeal) Enclosure		Marsh		Military		Public Open Space		Orchard
	Planned Enclosure		Industrial Complex		Historic Settlement Core		Sports Field		Allotments
	Very Large Post War Fields		Motor Industry		Terraced Housing		Airfield		Nursery/Garden Centre
	Paddocks and Closes		Radio/Telecommunications		Semi-Detached Housing		Motorway		
	Woodland Clearance		Utilities		Detached Housing		Railway		
	Ancient Woodland		Waste Tip		Flats and Apartments		Disused Railway		

Map showing HLC fieldscapes crossing parish boundaries at Wasperton and Barford

A similar example can be seen with Newbold-on-Avon and Harborough Magna parishes where piecemeal enclosure crosses the two parishes. However, in this case the parish boundary divisions are only marked on the OS 1st edition and have subsequently been amalgamated once again.

A rapid examination for similar examples across the county found a number of other examples listed below, although there may well be more.

- Preston Bagot with Claverdon parish
- Weethley and Salford Priors parish
- Oldberrow with Wootton Wawen parish
- Wootton Wawen with Tanworth in Arden parish

In other cases parishes meet at certain significant points. For example there are four parishes meeting at Tomlow, near Stockton, Stratford-on-Avon. Another pattern recognised is at Gospel Oak where a number of parishes meet (Aston Cantlow, Bearley, Snitterfield and Old Stratford).

However these examples are few and far between and in general most field boundaries match parish boundaries. This does not solve the problem of understanding which boundary is older though because the parish boundary could have been formed to match the field boundary or vice versa, or even that the parish boundaries are based on older boundaries and then the field boundaries match them later.

Parish boundaries often follow more natural landscape features such as rivers or woodland. Often woodland survives at the edge of a parish, forming the parish boundary. Examples of this are at Bilton, Stockton, Radford Semele, Wormleighton, Stoneton and Weethley. Occasionally unusual long sinuous strips of woodland have remained along parish boundaries such as Long Spinney (Withybrook, Monks Kirby and Wolvey parishes).

In the later part of the 20th century with the rapid expansion of settlements, field boundary loss and the amalgamation of fields into very large prairie type fields there has also been an erosion of parish boundaries. Many fields, settlement and other HLC types no longer respect the parish boundaries and the mapped boundary may have no physical representation left in the field or settlement.

Localities/Super Output Areas

Other more recent quasi-administrative areas such as Localities or Super Output Areas have been designed for determining statistics in the county

Localities

Localities are fairly new areas that have been defined by the Government primarily for the purposes of determining statistics. They tend to combine a number of wards and are based more on population size rather than the physical area they cover. In Warwickshire 23 localities have been defined covering the five Districts

Super Output Areas

Super Output Areas (SOAs) were introduced in 2004 and have been used to replace electoral wards as the primary means of the capture and dissemination of small area statistics. This is primarily because electoral wards are subject to regular boundary reviews, making it difficult to develop trend based data. In addition electoral wards vary enormously in population size which makes it nearly impossible to draw accurate comparisons across the country at an electoral ward level.



An example of Super Output Areas in Warwickshire

SOAs are designed to be consistent in population size thus allowing comparisons to be more meaningfully made. It is also envisaged that the boundaries will not change, allowing trend based analysis for particular areas (e.g. specific area based initiatives such as regeneration schemes) to be developed. The underlying 'building blocks' for SOAs are Census Output Areas.

Three different SOA layers have been created;

Lower Layer: Each lower layer SOA contains between 1000-2000 people. They are much smaller than electoral wards but are constrained by electoral ward boundaries. There are 333 lower layer SOAs in Warwickshire

Middle layer: Middle Layer SOAs are built up from lower layer SOAs and contain approximately 7200 people. Middle layer SOAs are constrained to local authority boundaries (the 5 districts in Warwickshire) but not automatically to electoral wards.

Upper Layer: The exact nature of the upper layer SOAs is yet to be decided, although it is thought that the minimum number of people they will contain will be about 25,000.

It is hard to see how HLC can be used to help analyse or provide information about these newly defined areas. However, HLC could be used in the summary texts of these different areas to highlight historic landscape character which may help show one aspect of the historic environment for these areas. HLC may also help in land classification and in looking at statistics in these areas over time.

Cotswold Area of Outstanding Natural Beauty (AONB)

The Cotswolds AONB is the largest AONB in the country. It was created in 1966 and contains around 203,800 hectares. Only two small parts of this area are within Warwickshire, in the very south and south east of the county. The AONB area was excluded from the Warwickshire HLC project due to an earlier HLC project having covered the whole Cotswolds AONB area.

The Cotswolds AONB HLC project was started in 1997 and a report was published in 1999. It is one of the older HLC projects in the country but was one of the first to use GIS. As a result of this the data from this project was compared with the Warwickshire HLC data.

One of the immediate problems recognised with the Cotswolds AONB HLC data when compared to the Warwickshire data was that the GIS data is hard to use because only a coded field is recorded in the GIS which has to be decoded from the report to understand the Historic Landscape Character type. If this could have had the full type name and perhaps a summary description this would help people use the data more quickly and with less reference to the report. A summary description of each identified HLC area would also be useful.

Another problem is that the polygons were mapped in grid squares and so do not form complete contiguous polygons but are broken at each grid square.

The Cotswolds AONB HLC has also been carried out at a slightly lower level of detail and resolution than the Warwickshire HLC. As a result there are some particular features that do not have as much detail as the Warwickshire HLC such as settlement, especially farmsteads and some field types.

In the Cotswolds AONB HLC symbols are used to denote Deserted Medieval Villages (DMVs) and this is an attempt to show time depth but distracts a little from the present day landscape which HLC is meant to show. A better way may be to add this information as a previous HLC type or in the description text.

When comparing the two sets of data the polygons at a Broad Type level from one area to another match very well. This shows that there is congruity in the historic landscape types defined in each study and this would signal a good potential to link them or use them together.

Some of the field types and boundaries and polygons match very well together such as in the eastern part of the AONB in the Warwickshire area. Other areas do not match so well, such as in the west around Meon Hill but this may be because the landscape changes dramatically here.

One of the other aspects investigated was determining the level of use of the Cotswolds AONB HLC project and results.

There is a comprehensive Landscape Character Assessment for the Cotswolds area that was completed in 2002 which makes reference to the Cotswolds AONB HLC project.

“The Historic Landscape Characterisation (HLC) of the Cotswolds AONB was also of considerable importance to the landscape character assessment. The HLC study, completed in 1999 and re-evaluated following the recent completion of the

Gloucestershire Landscape Character Assessment, reveals how the present landscape is a result of various historic processes and that it contains many features and elements that reflect aspects of its evolution. The findings of these independent studies were made available at an early stage of the assessment and proved invaluable in the mapping and description of landscape character types and landscape character areas.” (Cotswolds AONB Partnership, 2002)

The LCA is very detailed including a section for each area on ‘human influences’ which summarises the archaeology and history for each landscape character area including historic character.

Recommendations:

It is strongly recommended that the Cotswolds HLC is updated with the Cotswolds area within Warwickshire as an enhancement project. This could be done fairly rapidly by taking the AONB HLC data and applying the Warwickshire methodology including enhancement of those types lacking details such as settlement, farmsteads and some of the fieldscape areas.

This would then form a single consistent dataset for use by Stratford-on-Avon District Council and others interested in this part of Warwickshire instead of the two different projects and datasets existing.

Sample Thematic analysis

Historic Sporting Landscapes of Warwickshire

To illustrate how the HLC can be used to pursue particular themes, a rapid assessment of the historic sporting landscapes was undertaken primarily using the HLC data.

A number of HLC types were identified as having a sporting element and making up part of the sporting landscape of the county. These were:

- Golf Courses
- Sports Grounds (Football, Rugby, Cricket, Bowling and Archery)
- Leisure Centres
- Racecourses
- Fishing Lakes
- Stadiums

And in previous HLC types:

- Deer Parks

Other sports could be implied indirectly from these other HLC Types

- Artificial Water (water sports such as sailing, windsurfing canoeing, fishing etc)
- Natural water (fishing, water sports)
- Woodland with the names Covert or Spinney
- Farms with name Kennel or Hunt

From this a list of sporting landscapes in Warwickshire was drawn up consisting of:

- **Golf**
- **Racecourses**
- **Stadiums**
- **Fishing**
- **Water Sports**
- **Leisure Centres**
- **Sports Fields**
- **Hunting (Deer, Fox and Game)**

Golf

Golf is believed to have originated from Scotland in 12th century.

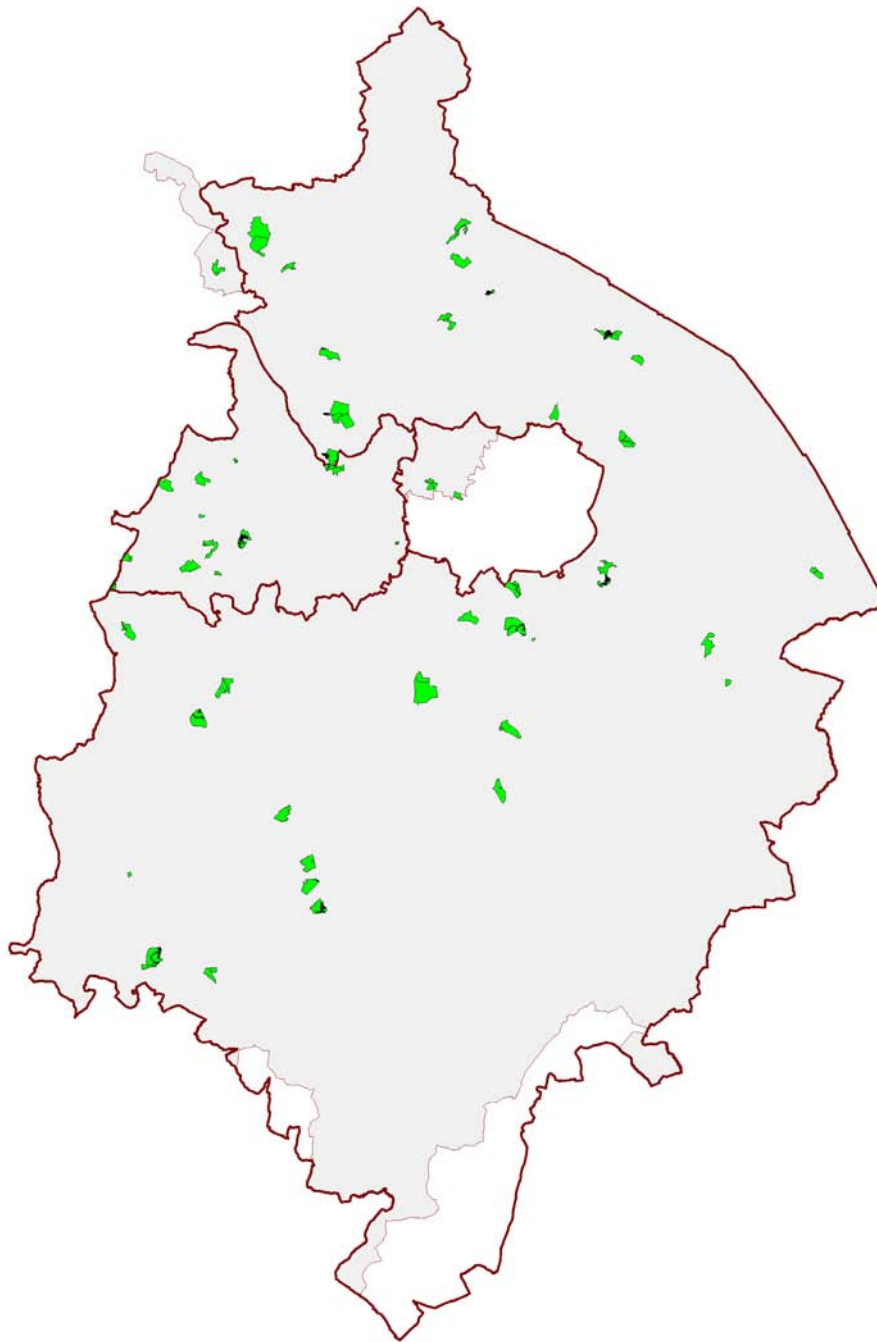
The first golf courses in Warwickshire are found on the OS 2nd edition maps (dating them to between 1884-1906). Earlier courses are unlikely.

The oldest golf course in Warwickshire is the Kenilworth Golf Course established in 1889. Other old golf courses in Warwickshire include the North Warwickshire Golf

Course (1894) and the Robin Hood Golf Course (1893), both of which are found in Solihull Metropolitan Borough.

Between 1880-1955 there was a moderate increase in numbers of golf courses in the county with 10 recorded in Warwickshire from this period, mainly found in north and western Warwickshire.

Post-1955 there has been a boom in golf courses with new courses still being created. Currently there are 47 golf courses in Warwickshire with the largest being The Belfry in North Warwickshire of around 200 hectares. The smallest ones are around 3 hectares and vary from private golf courses to small courses associated with hotels.



Location of golf courses recorded on the HLC

The distribution of Golf Courses in the county shows a bias to the north and west of the county, with a large number in Solihull. This may be because of the proximity to the larger settlement areas of Birmingham, Coventry and Solihull.

A number of golf courses have been created in the parkland grounds of large halls and manor houses, or areas where they had once existed. In this case it is interesting to note that Golf Courses continue the HLC broad type character as a designed landscape.

Racecourses

Two racecourses still exist in Warwickshire at Warwick and Stratford-upon-Avon. The Warwick Racecourse has origins from 1775, and possibly as early as 1728, while the Stratford Racecourse originates in the 1890s or possibly earlier, with a steeple chase taking place here since 1755.

Other racecourses once existed in the county. For example at Atherstone a racecourse is marked on the OS 1st and 2nd edition maps but was replaced with an industrial area. At Packington a racecourse was marked on the OS 1st edition but is now fields. A third former racecourse is marked at Shirley on the OS 2nd edition. Before this on the OS 1st edition fields are marked and the area is now a golf course.

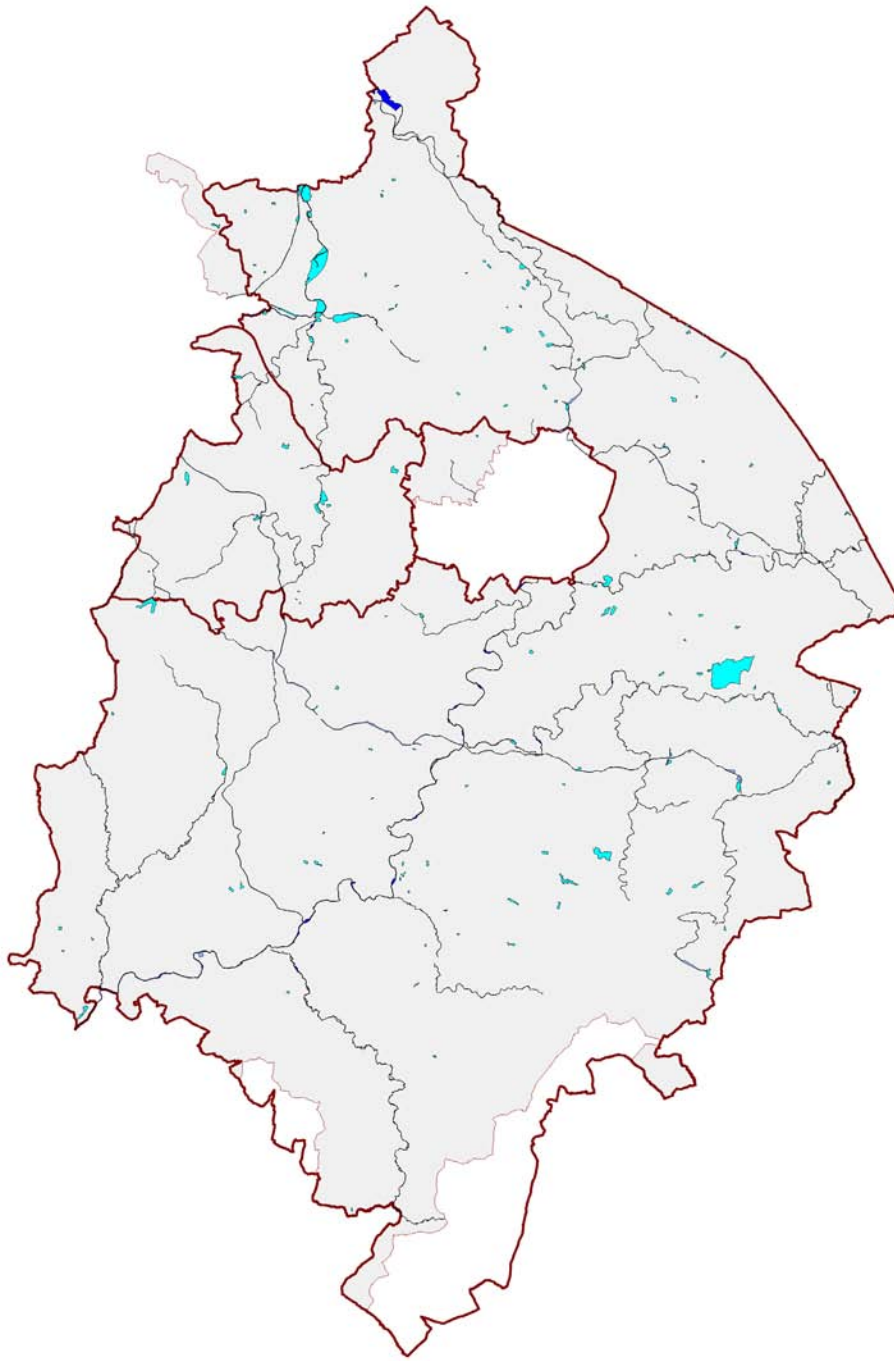
Stadiums

Only one stadium is recorded in the HLC and this is the Coventry Stadium just next to Binley Woods. This is a greyhound racing track and is first marked on the 1955 OS map. Greyhound race tracks and stadiums appear to be a rare type in England with only 28 official tracks left in the country. There may be a need to investigate the historic potential of this site. A second greyhound racetrack is recorded by the HLC at Warwick but appears to be an independent greyhound racing track not regulated by the Greyhound Board of Great Britain.

Fishing

Fishing as a sport appears to have become more popular as the 20th century progressed.

Traditionally in Warwickshire the main rivers and natural water courses would have been fished and perhaps some ponds, lakes or reservoirs. In the later part of the 20th century stocked organised pools have been created as a commercial enterprise for this recreational sport. In Warwickshire 15 of these fishing areas can be found, mostly in the north of the county. Draycote water is also popular for fishing as are other reservoirs, the canals and the rivers and brooks across the county.



Location of water features recorded on the HLC

Water Sports

Different types of water sports have developed in the 20th century such as canoeing, windsurfing, rowing and sailing. All these can be found taking place on the county's reservoirs especially Draycote Water, the largest open expanse of water in the county, as well as on the main rivers such as the Avon and Leam.

Leisure centres

These multiuse and multisport centres are found spread throughout the county. There are 7 recorded in Warwickshire (Newbold Comyn in Leamington, St Nicholas in Warwick, Abbey Fields in Kenilworth, Ken Marriot in Rugby, Stratford Leisure Centre, Fordbridge in Solihull and Tudor Grange in Solihull.)

Most are modern post-1955 developments responding to an increased interest in small sport and leisure activities. At Abbey Fields in Kenilworth the leisure centre is on the site of an earlier public swimming baths marked on the OS 2nd edition.

Sports fields

There are around 240 sites recorded as sports fields by the HLC in Warwickshire. These are generally small areas in and around main settlements with concentrations at Rugby, Nuneaton, Warwick, Stratford and Solihull but many smaller towns and villages also have sports fields. Most originate to between 1900 and 1955 but a handful have been recorded on maps as sports fields for at least 100 years.

Sports grounds may have only begun to have been routinely recorded from the OS 2nd edition onwards and this may explain the lack of older sites and why few are found in the OS 1st edition maps.

This type covers the following sports grounds:

- Cricket Grounds
- Rugby Grounds
- Football Grounds
- Bowling Greens
- Tennis Courts
- Occasionally other types of sports grounds such as Archery

In the case of archery there is one ground identified in Warwickshire near Meriden. This is Meriden Archery Club and grounds and has been marked here on the OS 2nd edition onwards as an archery ground. However, the site has even earlier origins in the form of the Pavilion and Club House designed by Joseph Bonomi and built in 1788 for the Woodmen of Arden archery club, founded in 1785. This shows that this site has been used for archery for over 220 years.

Deer Parks

One large element of the landscape in the past that could be considered a sporting landscape is the deer park. Deer parks in England may have originated in the Anglo-Saxon period but became more popular in the Norman period. Around 35 are recorded in Domesday Book in the country, but many of these associated with Royal Forests.

Rackham (2001, p.152) contends that by AD1300 there were about 3,200 parks in England which accounted for 2% of the area of the country.

Many of these continued in some form of use in the post-medieval period and developed through to the 18th century as part of gentleman's parks (often called ornamental parks). It is certainly true that many of Warwickshire's examples of designed parks associated with 17th-18th century halls and manor houses are either on the site of or are associated with deer parks.

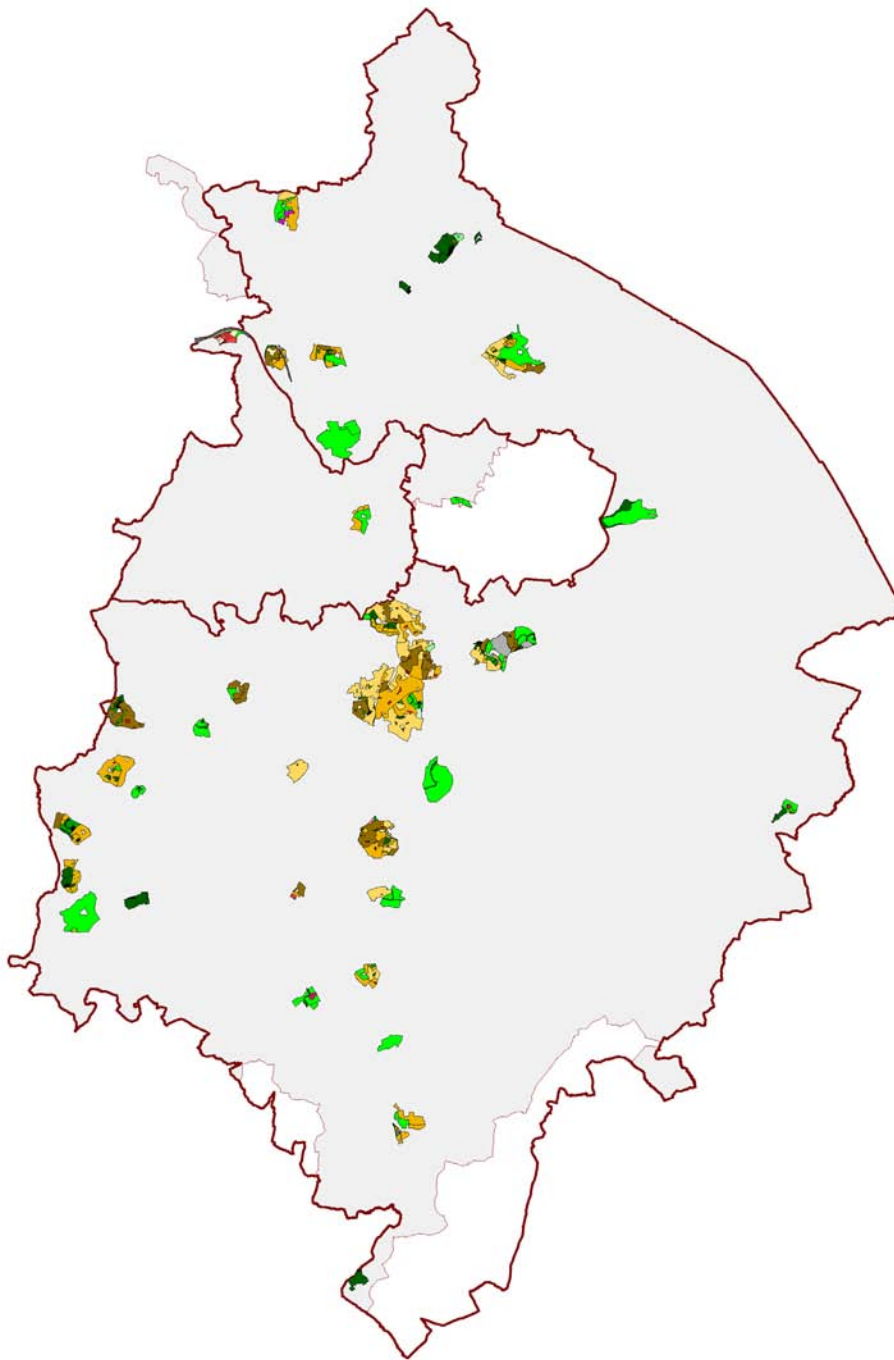
Deer parks were not always for hunting though and often were used to supply venison meat. It seems that in many cases land of poor fertility was utilised, with few parks found in areas of high agricultural production, however this view is being challenged with the argument that many more were on the best land (and have

subsequently been largely lost to view), either close to or surrounding the castle or manor house, with the conspicuous waste of good land a sign of high status

The Warwickshire HLC identifies 38 distinct deer parks in the county. A list of Deer Parks in Warwickshire can be produced and is found below.

- | | |
|--|---|
| 1. Berkswell | 20. Middleton Park |
| 2. Park Hall Park | 21. Allesley Park |
| 3. Kenilworth Chase (Old
Park/Great Park/Queens Park) | 22. Stoneleigh Park |
| 4. Wedgnock Park | 23. Shuckburgh Park |
| 5. Haseley Park | 24. Honington Park |
| 6. Coombe Abbey | 25. Ettington Park |
| 7. Hampton Park (possible) | 26. Goldicote Park |
| 8. Fulbrook Park | 27. Coughton Park |
| 9. Warwick Castle Park (possible) | 28. Old Park (Arrow) |
| 10. Charlecote Park | 29. Oversley Park (New Park) |
| 11. Clopton Park | 30. Sperrall Park |
| 12. Claverdon Park | 31. Ragley Park |
| 13. Bentley/Monks Park | 32. Henley Great Park and Henley
Little Park |
| 14. Hoar Park | 33. Lapworth Park |
| 15. Purley Park | 34. Alscot Park |
| 16. Coleshill Park | 35. Skilts Park |
| 17. Maxstoke Park | 36. Studley Park |
| 18. Arbury Park | 37. Beaudesert Park |
| 19. Packington Park | 38. Baddesley Park |

Most of these are recorded in the HER. Some could have been more than one park at any one time, for example Kenilworth Chase also included at certain periods the Old Park, Great Park and Queens Park. Some of these 38 deer parks could also date to the post-medieval period.



Location of former deer parks recorded on the HLC

There are some deer parks recorded on the HER but not on the HLC. The reason for this is that the exact extents are not known from map or landscape evidence and are only recorded from documentary sources. These additional deer parks include Kingshurst Park, Morton Bagot Park, Rowington Park, Baddesley Park and possible parks at Long Itchington, Snitterfield and Piles Coppice.

These are found spread throughout the county although most are in the north and western part of Warwickshire. The reason for this may be associated with the more fertile land in Warwickshire lying to the south and east while in the north and west the area was more a mixture of heathland, commons and wooded areas with less productive agricultural land on account of the different geology and soil types.

A band of Deer Parks is visible running from Honington northwards to Kenilworth, Packington and Middleton. Any reason for this pattern is unclear. There is also a ring of Deer Parks that almost entirely encircles Stratford and Wilmcote. The reason for this again is unclear, and these patterns may be just a coincidence.

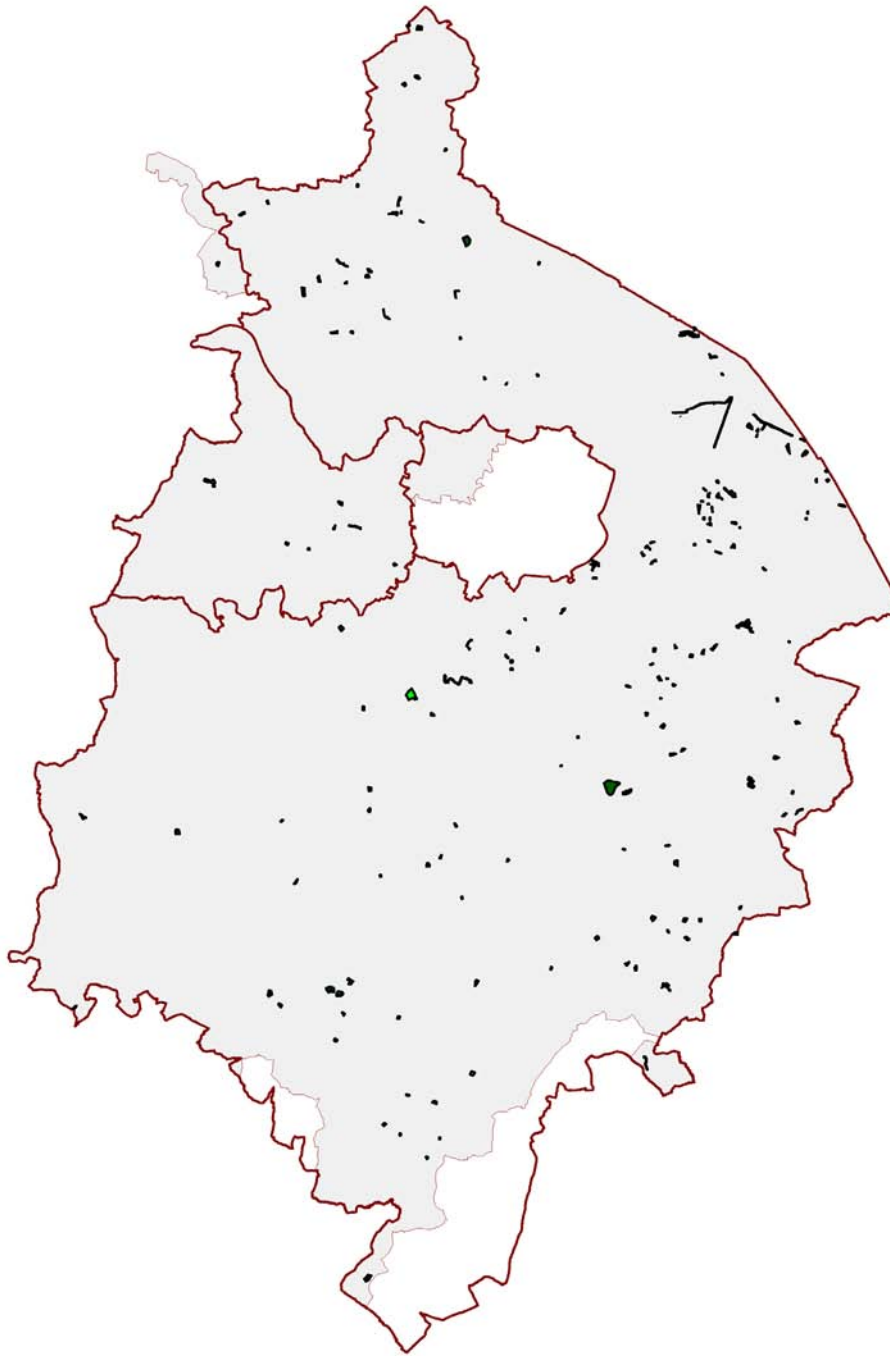
The largest deer park identified is Kenilworth Chase at around 1000 hectares. This lies next to Wedgnock Park, another large deer park of around 900 hectares, which in turn lies next to Haseley deer park whose boundaries are less clear but could be another 400 hectares. These three abut each other although in the case of Kenilworth Chase and Wedgnock they both had separate park pales with a road running between them.

The exact extents of most of the deer parks in Warwickshire are not very well known, with only a few physical park pales and boundaries still existing. The extent can often be inferred from field boundaries and sometimes from woodland boundaries. Deer Parks often took in woodland and were not always stable in size.

Fox hunting

By the 18th century, hunting hares and foxes was an important leisure pursuit, particularly for the rural gentry and their followers, and organised hunts were established throughout England. Part of this planned approach often meant manipulating parts of the landscape, for example small areas of woodland or scrub were created in certain positions to provide cover for foxes and other animals which were then flushed out and hunted. These areas often contained the name covert (meaning to cover) or spinney (meaning thorny, inaccessible scrub/woodland)

The HLC was used to show where records were recorded with Covert or Spinney in the name. This is not completely comprehensive, however, because areas less than one hectare in size are not generally recorded by the HLC and typically Coverts and Spinney were small areas.



Location of woods with the name 'Covert' or 'Spinney' recorded on the HLC

Despite this, 54 coverts are recorded in the county. They are generally around 3-4 hectares and tend to cluster in groups of 4 or 6 in particular areas in the county. Most Coverts are found in the south and east of Warwickshire with another small concentration around Whitacre Heath in North Warwickshire.

Some of these sites are marked as Fox Coverts on the OS 1st and 2nd edition maps.

There are 134 Spinneys recorded by the HLC being on average around 2-3 hectares. Some, like Long Spinney, are long sinuous formations of woodland that follow administrative boundaries but could also have been used for hunting.

Most spinneys appear to be in the north and east of the county with a complete lack in the west apart from a small concentration around Balsall Common. There is a large group of spinneys between Brinklow and Easenhall with another group leading southwest out of Rugby to Frankton and Marton. These patterns may be representative of hunting areas and routes used.

Other evidence for hunting can be found in the kennels used to house the hunting dogs. There is one site recorded in the HLC of hunting kennels at Kineton. This is recorded as a Farmstead (HWA12305) called "The Kennels - Warwickshire Foxhounds". It is recorded as such on the OS 1st edition onwards. The listed buildings record for this site dates the kennels to 1839 as: "Hunt houses, stables and kennels. 1839. By Hugh Williams (a hunt member)." Prior to this the area is marked as part of a park on Greenwood's map of 1822.

A few other kennels are recorded by the HLC but tend to be modern commercial kennels rather than related to hunting.

There is one placename that may relate to hunting and that is Chadshunt, interestingly just two miles north east of Kineton, the site of the Warwickshire Foxhounds Kennels.

In terms of other types of hunting sites it is difficult to identify any others in the HLC; the only other type recorded by the HLC and HER is decoy ponds, with 4 recorded in Warwickshire.

Conclusion

The purpose of this chapter was to understand how characterisation had developed in the county and to show some examples of how HLC could be used to perform analysis at a countywide level in conjunction with other forms of characterisation and with other datasets and through thematic analysis.

It has been demonstrated that HLC can contribute greatly to other characterisation studies and should form a key part of any study or analysis of the landscape.

It has also been shown that the HLC forms an integral part of the HER and can complement present data and records and should be used in conjunction with other Historic Environment information for a far more detailed picture of the past of the county.

Other datasets such as the HBA could also benefit from using HLC data and the true potential of using the HLC data for further studies and to support, or be compared with other datasets needs to be explored further.

Only one thematic topic was covered in this level of analysis but it is felt that this has provided a unique view on the sporting history of Warwickshire and raised a series of questions for further research such as why golf courses are found in certain areas of the county and not in others, or whether planted woodland can help show fox hunting routes, or how deer parks developed over time and their true impact on the landscape?

A similar level of analysis can of course be applied to research other themes of Warwickshire's past. Some other themes are suggested below:

- Warwickshire's Industrial Landscape
- The development of field types in Warwickshire from the medieval period onwards
- 20th Century Military Landscapes of Warwickshire

Chapter 6 - District Analysis

Introduction

Analysis of HLC material was carried out for each district in the project area excluding the rural quarter of Coventry and the small rural strip of Birmingham.

For each district an introduction is given summarising key facts about the area; a summary of historic landscape character follows with statistics about the Broad HLC Types and then more detailed analysis is given arranged by HLC broad type with detail added about the HLC types, their distribution across the area and their impact on the development of historic landscape character over time.

This chapter serves as a broad summary of the Historic Landscape Character for each local authority area, but for further detail including such topics as archaeological potential and management issues please refer to the HLC Broad Type or HLC Type analysis in Chapters 3 and 4.

Nuneaton and Bedworth Borough

Introduction

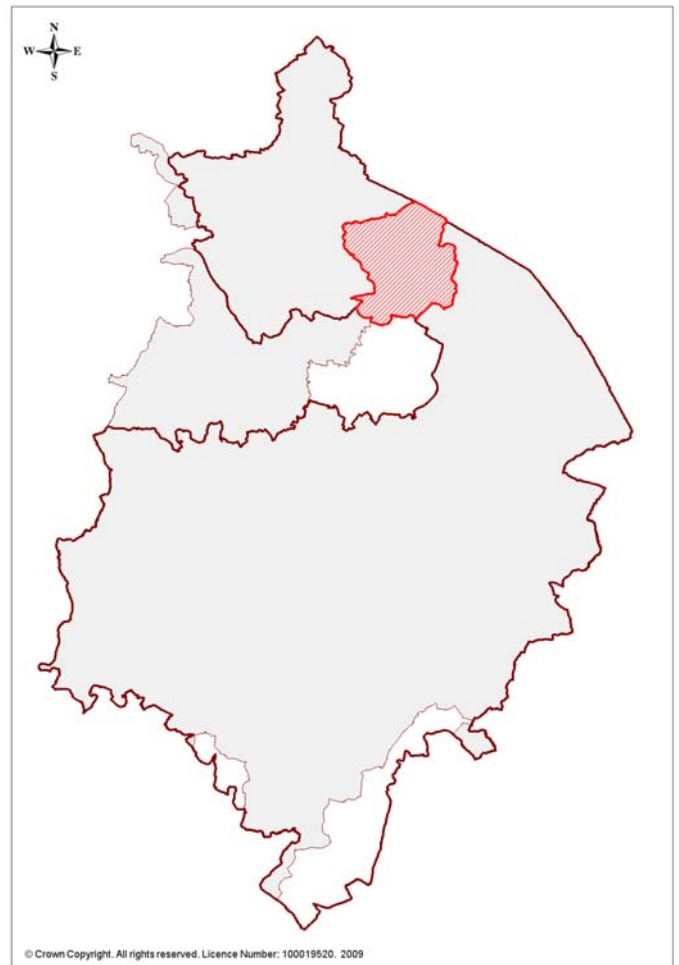
Nuneaton and Bedworth Borough was created in 1974 from the merger of the municipal borough of Nuneaton and the urban district of Bedworth (which included Bulkington).

The Borough is 7,898 hectares in size with a population of 121,200 people. This gives a density of 1,534 persons per square kilometre and makes it the most densely populated district in Warwickshire.

Largely urban in nature the Borough has three main communities: Nuneaton, Bedworth and Bulkington.

The three settlements are separated by narrow areas of mainly unpopulated countryside which are designated as Green Belt.

It borders the Warwickshire districts of Rugby to the south east and North Warwickshire to the northwest with Coventry City to the south and the county of Leicestershire to the north.



Summary of Historic Landscape Character

Despite being the most intensely populated borough in Warwickshire and including the urban areas of Nuneaton and Bedworth, the settlement element only makes up around a quarter of the total area of the Borough. Other HLC types related to settlement and urban areas including civic and commercial, industrial and some parks and recreational areas make up another 11%. Around half of the Borough comprises fieldscapes and the character is a mix between an urban and rural borough.

There are no active coal mining sites left in the area but there was once a string of mines running from the south to the northwest of the Borough following the Warwickshire Coal Seam. The coal mines brought industry and transport links to the area which are still significant today including the Coventry Canal, the Ashby de la Zouche Canal and the large number of railway lines that pass through Nuneaton.

Other extraction works include hard rock quarries with two, Judkins Quarry and Griff Quarry, having a large impact being almost 100 hectares in extent. Part of the land near these extraction sites is being used as a waste tip while other areas have been filled and left to form scrub which explains the slightly larger than average amount of unimproved land in the Borough.

The Borough area is sparsely wooded with less than half the county average, although some of the woodland coverage forms part of Arbury Park, a designed landscape which dominates as the largest park and garden in the Borough.