

LANDSCAPE CHARACTER ASSESSMENT

June 2019



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EXECUTIVE SUMMARY

FPCR Environment and Design Ltd were appointed in January 2019 to undertake a Landscape Character Assessment for the Charnwood Forest Regional Park along with a review of the character of the main settlements located within the area.

Introduction

An original landscape character assessment was carried out in 2008 as part of the Charnwood Forest Landscape and Settlement Character Assessment published by Leicestershire County Council. This Landscape Character Assessment document provides a review and update of the original study, to provide a finer grain of assessment detail and incorporates changes to the landscape and settlements that have occurred over the last decade. The assessment has been carried out and produced by a team of Chartered Landscape Architects from FPCR Environment and Design Ltd.

As part of the process of landscape characterisation, a consultation event was held on 1st May 2019 with stakeholders attending a workshop held at Beaumanor Hall in Woodhouse. The draft character areas were presented and described with subsequent discussion held relating to the character area boundaries, names and descriptions as well as identifying appropriate forces for change and management issues within the areas. Feedback from the event was collated and has fed into the final character areas and descriptions. A summary of the consultation event is included at **Appendix 7.3**.

Purpose of the Study

This Landscape Character Assessment has been carried out in order to review and refine the original Charnwood Forest Landscape Character Assessment (2008), but also has the following purposes:

- to support the second stage application for Heritage Lottery Funding;
- to be used as a tool for future decision making.

Methodology

The Charnwood Forest Landscape Character Assessment has been prepared following guidance included within An Approach to Landscape Character Assessment (2014) published by Natural England. The Landscape Character Assessment has been carried out through the following basic work stages:

- Work Stage 1 Review and Update of Baseline Data
- Work Stage 2 Baseline Landscape Survey
- Work Stage 3 Initial Landscape Classification and Analysis
- Work Stage 4 Stakeholder Consultation
- Work Stage 5 Draft Report
- Work Stage 6 Final Report

Content of the Report

Chapter 1 – This chapter provides an introduction to the Landscape Character Assessment and outlines the purpose of the study and the Primary Objectives.

Chapter 2 – This chapter outlines the methodology and approach used to review and define the Landscape Character Areas of the Charnwood Forest.

Chapter 3 – This chapter provides an overview of the context of the Charnwood Forest area. It includes summaries of the existing landscape character assessments which cover the area, and other documents which are relevant to the study.

EXECUTIVE SUMMARY

Chapter 4 – This chapter provides an overarching description of the character of Charnwood Forest. It describes the main physical features of the area as well as human influences which have influenced the character of the area over time. The assessment identifies 11 different Landscape Character Areas as follows:

- Area 1: Bradgate, Beacon Hill and Outwoods Heathland and Forest
- Area 2: Ulverscroft Wooded Valley
- · Area 3: Charley Heath and Pasture
- · Area 4: Swithland/Woodhouse Farmland
- · Area 5: Groby Estate Woodland
- Area 6: Thringstone/Markfield Quarries and Settlement
- Area 7: Loughborough/Shepshed Mixed Farmland
- Area 8: Quorn/Mountsorrel/Rothley Settlements, Quarries and Farmland
- · Area 9: Rothley Brook Lowland Farmland
- Area 10: Groby/Ratby Wooded Farmland
- · Area 11: Thornton Plantation Farmlands

The character areas are shown on the figure opposite.

Chapter 5 – This chapter provides a more detailed description of the individual Landscape Character Areas. The descriptions include:

- Summary of Overall Character
- Specific Characteristics
 - Landform and Hydrology
 - · Landcover and Vegetation
 - Field Pattern and Enclosure

- · Settlement Pattern, Roads and PRoW
- · Cultural Heritage
- Perceptual Qualities
- Summary of Landscape Condition
- Forces for Landscape Change
- Sensitivities for Key Landscape Characteristics
- Management Recommendations

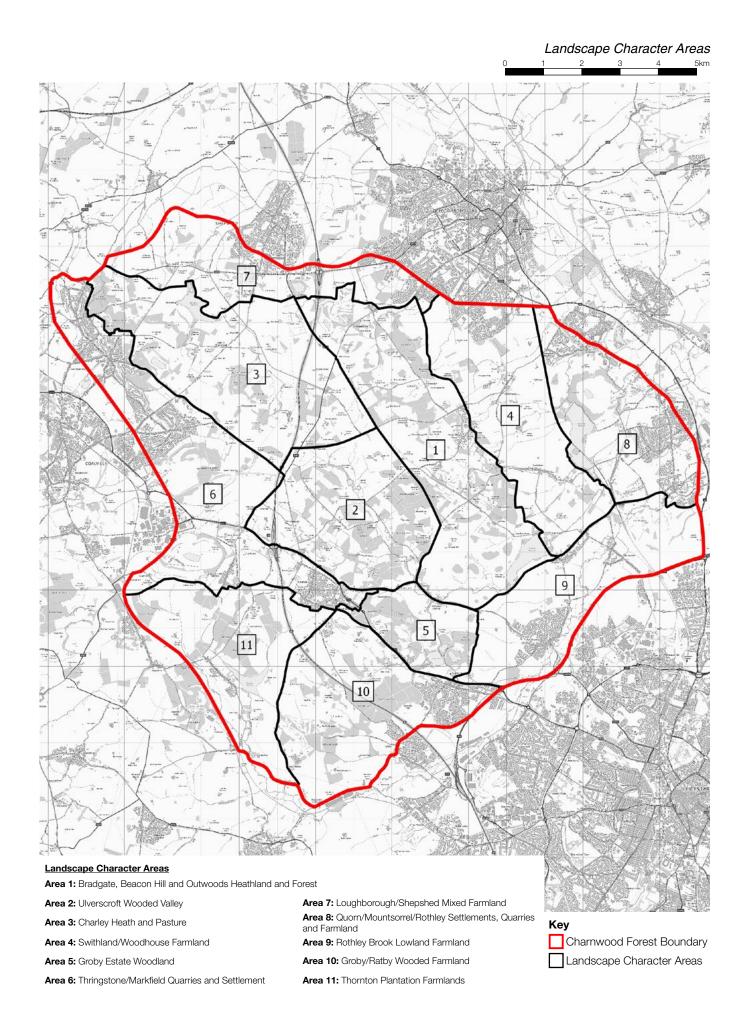
Chapter 6 – This chapter provides a review of the 19 settlements located within Charnwood Forest which were included within the original 2009 study. The settlement descriptions have been updated to take account of new developments which have been carried out in the last decade which have resulted in changes and growth to some areas.

The settlement descriptions include a summary on the following:

- Location and context
- Built form and settlement pattern
- · Sense of place
- Key characteristics
- Setting in the landscape
- Recommendations

Chapter 7 includes supporting appendices including a full set of figures, the completed Field Survey Sheets and a summary of the consultation event.

Chapter 8 includes key references.





Chapter 1.0

INTRODUCTION

Chapter 1.0

INTRODUCTION

An original landscape character assessment was carried out in 2008 as part of the *Charnwood Forest Landscape and Settlement Character Assessment* published by Leicestershire County Council. This Landscape Character Assessment document is a review and update of the original study, to provide a finer grain of assessment detail, and incorporates changes to the landscape and settlements that have occurred over the last decade. The assessment has been carried out and produced by a team of Chartered Landscape Architects from FPCR Environment and Design Ltd.

This study has been prepared with reference to the following key documents. **Chapter 8** provides a full list of references.

- National Planning Policy Framework (2019),
- An Approach to Landscape Character Assessment (2014).
- National Character Area Profiles; NCA 69. Trent Valley Washlands (2013), NCA 70. Melbourne Parklands (2012), NCA 71. Leicestershire & South Derbyshire Coalfield (2014), NCA 73. Charnwood (2013), NCA 74. Leicester and Nottinghamshire Wolds (2014), and NCA 94. Leicestershire Vales (2014).
- East Midlands Regional Landscape Character Assessment (2010)

- Borough of Charnwood Landscape Character Assessment (2012);
- Hinckley and Bosworth Borough Landscape Character Assessment (2017);
- North West Leicestershire Settlement Sensitivity and Capacity Study (2009);
- Charnwood Forest Landscape Character and Settlement Character Assessment (2008).
- The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project (2010).
- The National Forest Strategy 2014-2024
- Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire (2017)

As part of the process of landscape characterisation, a consultation event was held on 1st May 2019 with stakeholders attending a workshop held at Beaumanor Hall, Woodhouse. The draft character areas were presented and described with subsequent discussion held relating to the character area boundaries, names and descriptions as well as identifying appropriate forces for change and management issues within the areas. Feedback from the event was collated and has fed into the final character areas and descriptions.

Figure 1: Charnwood Forest Boundary Key Charnwood Forest Boundary National Forest Boundary

Chapter 1.0

INTRODUCTION

Purpose of the Study

This Landscape Character Assessment has been carried out in order to review and refine the original Charnwood Forest Landscape Character Assessment (2008), but also has the following purposes:

- to support the second stage Landscape Partnership Scheme application to the Heritage Lottery Fund;
- to be used as a tool for future decision making.

Primary Objectives

The Primary Objectives of the assessment are:

- to review and update information included within the original Charnwood Forest Landscape Character Assessment;
- to draw on existing landscape character information contained within other Landscape Character Assessments which cover the Charnwood Forest area such as the Hinckley and Bosworth LCA and the Borough of Charnwood LCA;
- to provide a document that will promote Charnwood Forest's unique sense of place through identifying distinctive landscape areas to be protected or enhanced;
- to help improve people's understanding of and connection to the Charnwood Forest area;
- to assess the sensitivity of the landscape and identify key landscape characteristics which are sensitive to change;
- to identify forces for change and other factors, such as development pressures, which could potentially impact negatively on the landscape;
- to develop recommendations for each landscape character area to ensure that the landscape is respected and reflected in development and interpretation.

Chapter 1.0 INTRODUCTION

The Study

The document comprises the following chapters:

- Chapter 1 Introduction
- · Chapter 2 Methodology
- Chapter 3 Landscape Context
- Chapter 4 Overview of the Landscape Character of Charnwood Forest
- Chapter 5 Landscape Character Areas
- · Chapter 6 Settlement Character
- · Chapter 7 Appendices
- · Chapter 8 References

Figures are included throughout the report with a full set also included at Appendix 7.1.





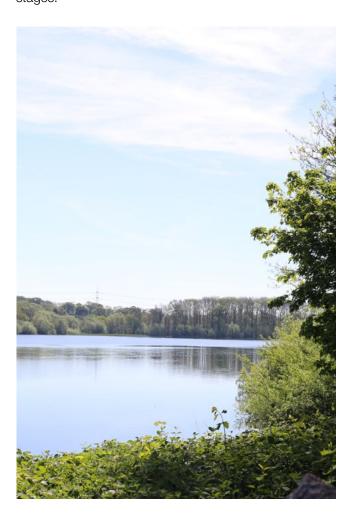
Chapter 2.0

METHODOLOGY

Chapter 2.0

METHODOLOGY

The Charnwood Forest Landscape Character Assessment has been prepared following guidance included within *An Approach to Landscape Character Assessment (2014)* published by Natural England. The Landscape Character Assessment has been carried out through the following basic work stages:



Work Stage 1 Review and Update of Baseline Data

This first stage was initiated by an inception meeting between FPCR and the Charnwood Forest Regional Park Partnership when the project requirements and outputs were finalised and timescales agreed. The level of detail was discussed and communication strategy agreed.

Following the meeting, relevant background data and information was reviewed and a preliminary site reconnaissance was carried out to gain an initial understanding of the Charnwood Forest area.

As part of the baseline update, we collated, reviewed and analysed the existing characterisation work previously undertaken at national, county and local scales to help inform the study. This included the National Character Area profiles, the Charnwood Borough Council and Hinckley and Bosworth Borough Council Landscape Character Assessments, and the previous Charnwood Forest Landscape Character Assessment which was completed in 2008. A full list of the key documents that have been considered in the preparation of this study is included at **Chapter 8**.

GIS mapping data has been provided by the Charnwood Forest Regional Park Partnership and this is used throughout the document. This includes information on access, landscape and other relevant designations, biodiversity, woodland, land use, hydrology, heritage and geology.

Preliminary landscape character areas were identified through combining and analysing the GIS data. These were developed through layering various elements within the landscape such as topography and hydrology, land use, field size and pattern, settlement pattern and scale, woodland cover and vegetation and urban features to identify areas of similar landscape character. These areas were then tested in the field.

Chapter 2.0 METHODOLOGY

Work Stage 2 Baseline Landscape Survey

Comprehensive field work was carried out during February and March 2019 by an experienced two-person team. A project-specific field survey sheet was prepared for the survey and this informed the assessment to ensure a structured, reasoned and consistent record of baseline information for each of the draft areas supported by a brief written description of landscape character. Representative photographs were also taken from selected locations to provide a visual record.

The Stage 2 field survey sheets were designed to record the following elements as part of the landscape classification exercise:-

- · Landform and Hydrology
- Land Cover and Vegetation
- Field Pattern
- Field Enclosure
- Settlement Pattern
- Landscape Elements/Distinctive Features
- Perception

The completed survey sheets are included at **Chapter 7**, **Appendix 7.2**.

Work Stage 3 Initial Landscape Classification and Analysis

Information collected from the baseline data review and field work was combined and used to develop draft landscape character areas. These were mapped and the character areas described, drawing out management issues and opportunities for each area along with sensitivities to particular changes and forces for change.

Work Stage 4 Stakeholder Consultation

The draft landscape character areas were presented at a stakeholder workshop. This event was carried out on Wednesday 1st May and included key members of the Charnwood Forest Regional Park Partnership Scheme. The draft character area boundaries and descriptions were discussed and comments obtained on the information identified. Feedback was taken and used in the development of the final character areas and descriptions. A summary of the consultation event is included at **Appendix 7.3.**

Chapter 2.0

METHODOLOGY

Work Stage 5 Draft Report

Following consultation, the draft report was prepared. This included a description of the final 11 character areas identified and included a map of each character area overlaid on an Ordnance Survey base, photographs and figures. The draft report was circulated to the client for final comment.

Work Stage 6 Final Report

Following final feedback, the report was completed and issued.

The resulting 11 Landscape Character Areas identified are:-

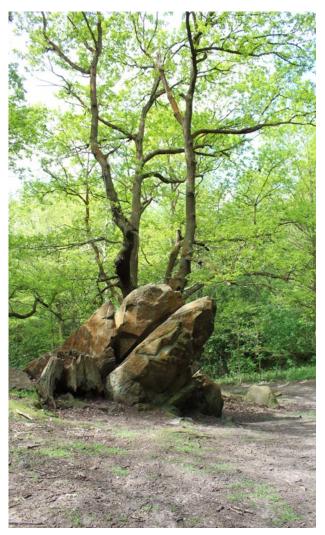
- Area 1: Bradgate, Beacon Hill and Outwoods Heathland and Forest
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- Area 9: Rothley Brook Lowland Farmland
- · Area 10: Groby/Ratby Wooded Farmland
- Area 11: Thornton Plantation Farmlands

Each of these Landscape Character Areas has been described. An analysis of their landscape character is captured through written text, supported by photographs as appropriate. The assessment follows a clear format under the following headings:-

- Summary of Overall Character
- Specific Characteristics
 - Landform and Hydrology
 - Landcover and Vegetation
 - Field Pattern and Enclosure
 - · Settlement Pattern, Roads and PRoW
 - · Cultural Heritage
 - · Perceptual Qualities
- Summary of Landscape Condition
- Forces for Landscape Change
- Sensitivities for Key Landscape Characteristics
- Management Recommendations

A map showing the location of the identified Landscape Character Areas across the study area has been prepared using ArcView GIS mapping and is included at Chapter 5, Figure 12. Although the boundaries are clearly defined, it should be recognised that landscape character is not always dramatically different from one side of the boundary to the other. In some places, there are obvious changes in landscape character while elsewhere and more commonly, the change may be more subtle and transitional. In general, boundary lines for the Landscape Character Areas should be regarded as indicative of broad landscape character. It is also important to remember that landscape character may alter over time as a result of changes within the landscape such as development changes in land use, and agricultural practices.

Chapter 2.0 **METHODOLOGY**









LANDSCAPE CONTEXT

LANDSCAPE CONTEXT

The Charnwood Forest Regional Park covers an area of 158km² and stretches across four local authority boundaries including Charnwood Borough, North West Leicestershire District, Hinckley and Bosworth Borough and the very northern extent of the City of Leicester (Figure 1 page 9 and Figure 2 page 21).

A number of published landscape characterisation studies have been carried out for the area, at both a national and district level, including the Charnwood Forest Landscape and Settlement Character Assessment which was completed in 2008. These documents provide the context for this assessment and include the following:

- National Character Area Profiles; NCA 69. Trent Valley Washlands (2013), NCA 70. Melbourne Parklands (2012), NCA 71. Leicestershire & South Derbyshire Coalfield (2014), NCA 73. Charnwood (2013), NCA 74. Leicester and Nottinghamshire Wolds (2014), and NCA 94. Leicestershire Vales (2014).
- East Midlands Regional Landscape Character Assessment (2010)
- Borough of Charnwood Landscape Character Assessment (2012);
- Hinckley and Bosworth Borough Landscape Character Assessment (2017);
- North West Leicestershire Landscape Character Assessment (2009);
- Charnwood Forest Landscape Character and Settlement Assessment (2008).
- National Forest Strategy 2014-2024
- The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project (2010).

National Context

Natural England have carried out landscape characterisation of the whole country and identified 159 National Character Areas (NCA). Each NCA is described in detail within a 'profile' which includes a description of the current landscape, describes how the landscape has changed over time and identifies key drivers for ongoing landscape change. The descriptions also include a set of Key Characteristics for each area and Statements of Environmental Opportunity.

Charnwood Forest is largely covered by NCA 73 Charnwood, but also extends into the adjacent areas of NCA 71 Leicestershire & South Derbyshire Coalfield to the west. The forest area also just overlaps the southern extent of area NCA 70 Melbourne Parklands, NCA 94 Leicestershire Wolds to the south and NCA 69 Trent Valley Washlands to the east (Figure 3).

NCA 73. Charnwood

Charnwood Forest is broadly associated with this NCA. The NCA profile includes the following description (please refer to the NCA Profile for full details):

"Charnwood is a unique landscape, marked out by its geology and upland qualities, which contrast with the surrounding gentle lowlands. It is formed by a mosaic of heathland, farmland, parkland and woodland. The underlying Precambrian geology has given rise to the distinct area of land characterised by exposures of rugged, rocky outcrops. It is a relatively well wooded landscape, with many areas of mixed, deciduous and coniferous woodlands. The western part of Charnwood lies within The National Forest, which offers people extensive access, environmental education and volunteering opportunities, and the chance to become involved with local community projects..."

Figure 2: Aerial Photograph Thringstone Blackbrook Reservoir Whitwick Quorn Woodhouse Woodhouse Eaves Agar Nook Swithland Cropston Thurcaston Cropston Reservoir Stanton under Markfiel Newtown Linford Anstey **Groby Pool** Thornton Thornton র্গ Groby Reservoir Ratby Charnwood Forest Boundary M1 Main Road Great Central Railway

Quarry

LANDSCAPE CONTEXT

The NCA profile identifies the following Key Characteristics:

- Upland qualities, including extensive open summits and distinctive rocky outcrops, rising from the surrounding lowland undulating farmland.
- Outcrops of ancient Precambrian rocks, with Mercia Mudstones in the vales; a significant proportion of the NCA is covered with superficial deposits of the Anglian ice age, as well as more recent deposits.
- Thin, acidic, infertile soils are found on upland slopes; mudstones in the valley bottoms produce a deeper, fertile soil.
- A well wooded character, with many areas of mixed, deciduous and coniferous woodlands.
 Large, ancient, pollarded oaks are a feature of country parks.
- Rectilinear patterns of parliamentary enclosure fields, bounded by a mixture of drystone walls and hedges. Many of the country parks are also bounded by drystone walls. Enclosure has created a distinctive road pattern.
- Land use is a distinctive mixture of woodland, predominantly pastoral farmland, heathland and parkland.

- A diverse variety of habitats (including woodlands, acidic grassland and heathland) support a large range of characteristic and rare species.
- Clear, fast-flowing watercourses and significant, large, open waterbodies and reservoirs.
- Historic parks and country parks such as Bradgate and Beacon Hill, large manor houses and the remains of medieval monastic buildings like Ulverscroft Priory are all prominent cultural heritage features that attract many visitors from the surrounding urban areas.
- Local Charnian rocks, Swithland Slate roofs, thatched roofs and some timber-framed buildings characterise the Charnwood villages.
- Occasional linear villages and scattered farmsteads through the heart of Charnwood contrast with larger settlements, which ring the elevated areas. A number of large quarries and some busy roads have an urbanising influence in places.



LANDSCAPE CONTEXT

The Statements of Environmental Opportunity include the following:

SEO 1: Protect, manage and promote the important geology and cultural interests of Charnwood, including the internationally significant Precambrian geology, the characteristic rocky outcrops, the unique country parks, the manor houses and the medieval monastic buildings, to ensure access and interpretation, and for people to enjoy and understand these important resources.

SEO 2: Conserve the strong settlement character of the inner Charnwood villages and ensure that development is sympathetic to the character of this rural NCA, surrounded by large and expanding urban areas. Maximise the green infrastructure and sustainable recreation opportunities.

SEO 3: Protect and significantly increase the extent and quality of the unimproved grasslands, heathlands, open waterbodies and streams, to enhance biodiversity, ecological networks, water availability and quality, climate regulation and sense of place.

SEO 4: Where appropriate, manage and expand the native woodlands throughout Charnwood to reinforce the wooded character, to increase the potential for biomass, access and recreation, and to regulate climate change and water quality.

The south western edge of Charnwood Forest extends into NCA 71: Leicestershire & South Derbyshire Coalfield. This is a linear form running north west to south east and covers the urban area of Swadlincote to the north west and the villages of Newbold Verdon, Desford and Ratby in the south east.

This NCA is described as follows:

"a plateau with unrestricted views of shallow valleys and gentle ridges that become less pronounced in the south due to a layer of glacial till. To the east the land rises steeply, affording views of the Charnwood National Character Area (NCA)...

The area has a developing woodland character, heavily influenced by work of The National Forest that covers the majority of the NCA...

The landscape is in continuing transition, from an unenclosed rolling landform that was extensively scarred by abandoned collieries, spoil tips and clay pits, to a matrix of new woodland, restored colliery sites, active brick pits and commercial developments...

The northern extent of Charnwood Forest extends into NCA 70: Melbourne Parklands which is described as "a landscape of rolling farmland, ancient and plantation woodland and... a cluster of landscaped parklands with grand country houses..."

The very eastern extent of Charnwood Forest encroaches into NCA 69: Trent Valley Washlands, a narrow, low-lying, linear landscape which covers the floodplain corridors of the River Trent.

The very southern extent of Charnwood Forest extends into NCA 94: Leicestershire Wolds "a large, relatively open, uniform landscape" which is dominated by Leicester City in the north eastern corner.

LANDSCAPE CONTEXT

Regional Context

East Midlands Regional Landscape Character Assessment (2010)

Charnwood Forest is located within Landscape Character Group 10: Woods and Forests within the East Midlands Regional Landscape Character Assessment 2010. The forest is broadly associated with Regional Landscape Character Type 10D: Forested Ancient Hills which has the following Key Characteristics:

- Upland landscape of ancient Pre-Cambrian igneous rocks, rising out of lowland farmland;
- Distinctive rocky outcrops and knolls on elevated slopes and summits with extensive open areas;
- Clear, fast flowing streams on upper slopes that support an abundance of wildlife;
- High proportion of woodland cover;
- Land use is a distinctive mixture of woodlands, predominantly pastoral farmland, heathland, and parkland;
- Strongly rectilinear patterns of parliamentary enclosure fields and roads bounded by a mix of dry stone walls and hedges;
- Remnant historic parks and associated houses:
- Large reservoirs and pools are common landscape features; and
- Occasional villages and scattered farmsteads within the upland area, often constructed in the dark local stone, in contrast to larger villages and settlements located mainly at the edge of the elevated ground.

This RLCT is described as follows:

"The Forested Ancient Hills Landscape Character Type is confined to a single area within the East Midlands Region comprising the Charnwood Forest area. The uniqueness of this Landscape Character Type is attributable to the underlying Pre-Cambrian geology which only occurs in this part of the region and has given rise to a distinctive area of elevated land with exposures of rugged rocky outcrops that rise above the surrounding lowland plain.

Overall, the Forested Ancient Hills has a well wooded character derived from the many areas of mixed deciduous and coniferous woodlands that are present, including ancient and wet woodlands. Within this pattern of woodlands, a mosaic of land uses extends across this elevated and dissected Landscape Character Type, comprising more open upland areas with heathland, mixed arable and pasture farmland, and remnant medieval parks, which together contribute to the diversity of the area. There is a notable concentration of SSSIs within the Forested Ancient Hills which is indicative of the high biodiversity value of many parts of the area it covers. The network of hedgerows and associated hedgerow trees that extends across the predominantly pastoral farmland contributes further to the sense of a well-wooded character.

The more elevated and open areas of the Forested Ancient Hills Landscape Character Type command expansive views to the surrounding lowland plain and distant horizons. In contrast, at lower elevations views are contained by the intricate pattern of woodlands and farmland and convey a secluded and intimate character."

LANDSCAPE CONTEXT

Local Context

Borough of Charnwood Landscape Character Assessment (July 2012)

This study was produced in order to inform future development management plans and decisions for the Borough. The character assessment evaluates the landscape of Charnwood Borough and includes a landscape strategy for each of the areas identified. A landscape sensitivity and capacity study has been completed for the areas which adjoin the urban edges of Leicester, Loughborough and Shepshed.

The document identifies 6 distinct character areas identified as follows:

- Charnwood Forest
- High Leicestershire
- Soar Valley
- Wreake Valley
- · The Wolds
- Langley Lowlands

The Charnwood Forest Landscape Character Area broadly relates to the eastern part of Charnwood Forest. This area has the following Key Characteristics:

- Charnwood Forest is the most complex of the landscape character areas and five sub-areas were identified within the Borough in the 2008 Charnwood Forest Landscape and Settlement Character Assessment
- The highly distinctive upland character contrasts with the lower lying nature of the surrounding landscape character areas. It contains the highest land in the Borough of Charnwood, rising to 248m (814ft) at Beacon Hill
- Landscape mosaic of pasture, frequent woodland and exposed hilltops of acidic grassland with rocky outcrops of ancient Pre-Cambrian volcanic and plutonic rocks with bracken and heathland

- Most densely wooded area of Charnwood Borough with coniferous and mixed deciduous woods
- Includes many wildlife areas and ancient seminatural woodlands
- Field boundaries of stone walls and large free growing hedges
- Strongly rectilinear pattern of parliamentary enclosure fields and straight roads
- Historic quarrying of granite and slates and still active quarrying of granite
- Historic houses and ruins Bradgate Country Park (Grade II Historic Park and Garden), Ulverscroft Priory and Beaumanor Hall
- Scattered settlements often of local stone with steeply angled slate roofs
- Settlements are Woodhouse, Woodhouse Eaves, Swithland, Cropston, Thurcaston, Anstey, Newtown Linford, western edges of Rothley and Mountsorrel, and the fringes of west Loughborough and south Shepshed
- M1 motorway passes through this character area
- · Much of the area is in the National Forest.

The character area is described as follows:

"The upland nature of Charnwood Forest, due to the underlying ancient rock, is very different from other landscape character areas within the Borough. The geology has strongly influenced both the natural vegetation cover and agricultural land use. It has the highest percentage of woodland cover and wildlife sites in Leicestershire. Small villages have a strong sense of identity through the use of local stone. The area is very popular for recreation and visitor pressure is increasing."

LANDSCAPE CONTEXT

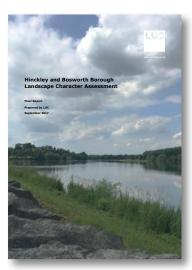
Hinckley and Bosworth Borough Landscape Character Assessment (2017)

This study is a review and update of the Hinckley and Bosworth Borough Landscape Character Assessment which was originally published in 2006. The study identifies 10 different landscape character areas and 6 overarching Landscape Types which describe more general characteristics of the landscape.

The north eastern extent of Hinckley and Bosworth Borough is included within the Charnwood Forest area. This sector relates to Area A: Charnwood Forest Settled Forest Hills and part of Area B: Charnwood Fringe Settled Forest Hills which are both part of the overarching Settled Forest Hills Landscape Character Type.

The Settled Forest Hills Landscape Character Type is described as

"Comprehensive forest cover on elevated landform with large open waterbodies influenced by a rich history in mining."



The Charnwood Forest Settled Forest Hills landscape character area is described with the following Key Characteristics:

- 1) Prominent elevated landform the highest land in the Borough. Localised steep slopes around rocky outcrops.
- 2) Distinctive pockets of igneous rock which appear as rocky outcrops. Granite quarries can appear dramatic in the landscape with cliff faces and deep pools.
- 3) Diverse land uses which relate to the varied geology. Dominated by pasture and woodland with quarries, pools and outcrops.
- 4) Woodland cover of varying age from mature ancient woodland to new National Forest plantations.
- 5) Small to medium scale field pattern interspersed with large areas of woodland cover.
- 6) Large clustered villages with strong suburban influences.
- 7) Distinctive local assets for recreation and biodiversity such as Groby Pool and Billa Barra Hill and network of public footpaths.
- 8) Distant views to the urban edges of Leicester and woodland edges of the surrounding National Forest.
- 9) Diverse range of woodland habitats due to variable land use types.
- 10) Proximity to Leicester City and major transport infrastructure.
- 11) Long established aesthetic appeal created by its rugged, 'upland' and wooded character.

Figure 3: Existing Landscape Character Areas The Wolds B - Charnwood Fringe Settled Forest Hills Key Charnwood Forest Boundary National Character Area (NCA) District Boundary Charnwood Borough Council Landscape Character Areas Hinckley and Bosworth Landscape Character Areas 2008 Charnwood Forest Character Areas 1 - Bradgate and Beacon 2 - Ulverscroft 3 - Charley 4 - Swithland D - Newbold and Desford Rolling Farmland 5 - Rothley Brook 6 - Thornton and Markfield 7 - Bardon

LANDSCAPE CONTEXT

The Charnwood Fringe Settled Forest Hills Landscape Character Area is described with the following Key Characteristics:

- 1) Gently undulating landform with small plateaus on higher ground and rising to the adjacent Charnwood Forest area to the east.
- 2) Contrast between areas which are visually open and enclosed depending on the elevation of the landscape and the presence of woodlands and vegetation.
- 3) Large scale irregular field pattern of mainly arable and some pasture, with smaller fields around settlements. Fields enclosed by hedgerows with scattered trees.
- 4) Industrial heritage of quarrying and mining resulting in areas of restored land.
- 5) Part of the National Forest and Charnwood Forest with areas of new woodland plantations associated with former industrial areas.
- 6) Dispersed pattern of former mining villages following a linear pattern on ridgetops, either located close to a colliery or providing housing for mine workers.

 Good public access and footpath network throughout, especially within National Forest area.
- 7) Predominantly rural landscape with arable and rough set-aside, influenced by industrial/urban features such as masts, poles and pylons.

Charnwood Forest Landscape Character Assessment

The original Charnwood Forest Landscape Character Assessment was published in 2008 by Leicestershire County Council. The document has been reviewed as part of the background analysis for the production of this updated Landscape Character Assessment which supersedes the original document.

The Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project

This study was carried out by Leicestershire County Council between 2006 and 2009. The study involves the examination of the geology, topography, ecology and archaeology of the area. A detailed Geographic Information System (GIS) mapping exercise was carried out through the creation of polygons, analysed against Historic Landscape Characterisation (HLC) attributes, to identify single historic landscape character types. Broad Character Types are identified as well as more detailed Historic Landscape Character Types which are described in detail within the document (see Figure 4). Within the Charnwood Forest Area, at the broad character type scale, the area is mostly identified as 'Fields and Enclosed Land' with areas of 'Woodland' but there are pockets of other types such as 'Unenclosed Land', 'Ornamental, Parkland and Recreational' for example at Bradgate Park, as well as 'Extractive and Landfill' areas in the locations of the quarries.

At a more detailed level, these Broad Character Types are sub-categorised and defined in terms of Historic Landscape Character Types. For a detailed description of each HLC type please refer to the Leicestershire, Leicester and Rutland Historic Landscape Characterisation document, specifically section 1.9.6.1.

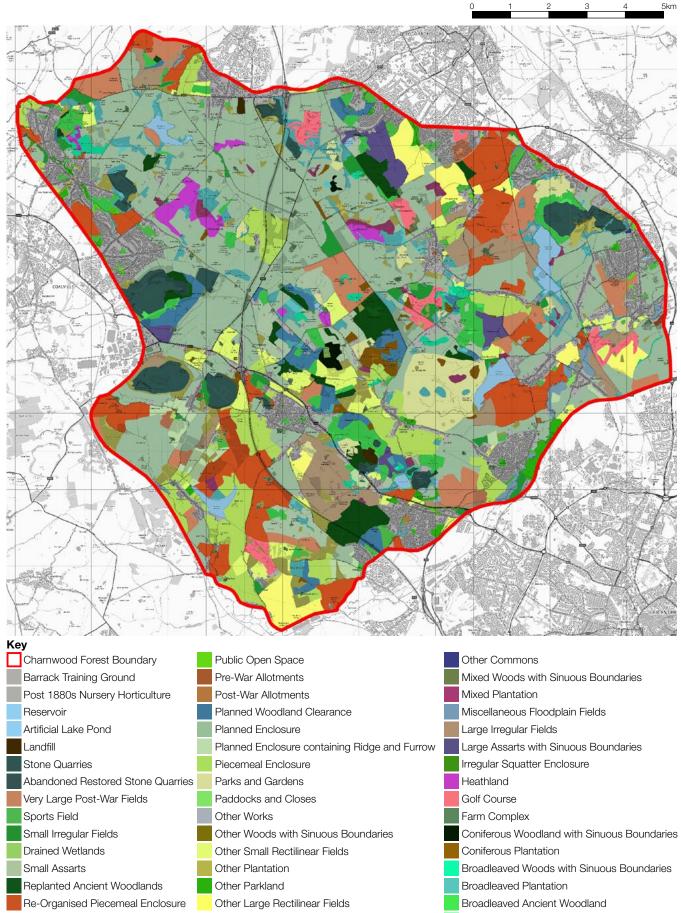


Figure 4: Leicestershire, Leicester and Rutland Historic Landscape Characterisation

Train Stations Sidings Cuttings

LANDSCAPE CONTEXT

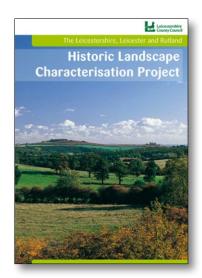
The Planned Enclosures HLC type predominates across Charnwood Forest particularly south of Shepshed and east of Whitwick. Re-organsied Piecemeal Enclosure HLC type is also extensively distributed over large tracts of land, wrapping around the peripheries of the forest from the northeast, round to the southern and western areas. Very Large Post War Fields, Large Irregular Fields and Other Large Rectilinear Fields as well as Large Assarts with Sinuous Boundaries HLC types follow a similar pattern of extensive landcover which are distributed along a crescent shape from south of Loughborough, past the north west of Leicester and Groby, extending west towards Coalville.

A more intensive mosaic of HLC types are evident within the more central area between Markfield and Woodhouse Eaves which consists of Planned Woodland Clearance, Piecemeal Enclosures, Piecemeal Enclosures with Ridge & Furrow, Small Assarts and Other Small Rectilinear Fields HLC types.

The Parks and Gardens HLC type is located at the centre of Charnwood Forest at Bradgate Park with a smaller area at Beacon Hill Park a little to the north west.

Broadleaved Ancient Woodland and Replanted Ancient Woodland HLC types are scattered across Charnwood Forest with extensive landcover east of Whitwick, south of Loughborough and west of Quorn as well as various areas surrounding Beacon Hill and Bradgate Park. Heathland HLC type is found mostly along the higher ground towards Whitwick and Grace Dieu but also smaller mosaics are present to the west of Loughborough.

Coniferous and Broadleaf Plantations are also scattered throughout the area with reservoirs and stone quarries also prevalent, including at Mountsorrel, Groby and Bardon.



LANDSCAPE CONTEXT

The National Forest Strategy 2014-2024

The National Forest extends over an area of 200 square miles across the Midlands and covers parts of Derbyshire, Leicestershire and Staffordshire (see Figure 1, page 9). Originating in the early 1990's the coverage of the National Forest has increased from the original 6% to nearly 21% in March 2019. The latest strategy identifies Key Objectives for the Forest for the period 2014-2019 with a Mid-decade review identified for 2019 which will influence the future objectives of the strategy to 2024. The main priorities and key activities identified to deliver the National Forest to 2024 are identified as:

- To be a national exemplar, centre of excellence and research partner;
- · To continue to create new forest;
- To manage all aspects of the forest including all habitats and visitor attractions;
- To create a 'great experience' for all customers;
- To build on the 'National Forest' brand and to be more entrepreneurial; and
- To develop the forest 'for everyone' to be inclusive, accessible and welcoming for everyone.

The National Forest covers a good proportion of the Charnwood Forest area, including the western and central areas.



LANDSCAPE CONTEXT

Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire (2017)

This study was prepared by LUC and forms part of the Evidence Base for the new Strategic Growth Plan for Leicester and Leicestershire. The document examines the sensitivity of the landscape within identified study areas to assess the extent to which different areas can accommodate development without impacting on key landscape qualities. It also identifies possible mitigation and considers the potential for positive change through the development and enhancement of Green Infrastructure.

Within Part 1 of the report, the document identifies existing Green Infrastructure assets¹ and Biodiversity assets² and designations across the county (shown within the document at Figure 4.2 and Figure 4.4) and shows a high proportion of these assets located within Charnwood Forest.

Part 2 of the report analyses Strategic Opportunity Assessment Zone profiles of which the southern extent of Area 2 'Northern Gateway' protrudes into Charnwood Forest. This area is identified overall as having a 'Moderate Sensitivity' to residential development (2-3 storeys) and commercial development (light industry).

Key landscape sensitivities identified for the area include:

- Small-scale strip fields and piecemeal enclosures which are usually associated with the edges of settlements.
- Valued semi-natural habitats including Blackbrook Reservoir which is nationally designated as a SSSI.
- Generally rural and tranquil in character throughout the majority of the landscape.

Two Green Infrastructure Opportunities are identified within the southern part of Area 2 as follows:

- 13. Shepshed-Thringstone Ecological corridor: (Biodiversity/Recreation and Play/Health and Equality): Create new areas of woodland, connecting the existing woods and copses, linking to the National Forest/Charnwood Forest.
- 14. Blackbrook Access and Recreation Project: (Strategic Destination/Biodiversity/ Recreation and Play): Enhance access and interpretation to create a new high quality semi-natural open space/destination at Blackbrook Reservoir with new multi-user rights of way from Shepshed.

¹ Green Infrastructure assets include: Special Area of Conservation, Special Protection Area, Ramsar, Site of Special Scientific Interest, National Nature Reserve, Ancient Woodland, National Forestry Inventory (Woodlands > 0.5ha), Local Nature Reserve, Local Wildlife Site, Open Space, Ordnance Survey Green Spaces, Green Wedge, Area of Separation

² Biodiversity assets and designations include: Special Area of Conservation, Special Protection Area, Ramsar, SSSI, National Nature Reserve, Local Nature Reserve, Local Wildlife Site, National Forestry Inventory (Woodland >0.5ha, Ancient Woodland, National Forest Scheme, National Forest, Charnwood Forest Regional Park.

LANDSCAPE CONTEXT

Part 3 of the report reviews Landscape Character Area profiles for the county and identifies Charnwood Forest as being of 'Moderate-High Sensitivity' to residential development (2-3 storeys) and commercial development (light industry).

The area is described as:

"Charnwood Forest is a distinctive upland landscape punctuated by rocky outcrops and fast flowing streams. A well wooded landscape including large tracts of ancient woodland. Fields are mostly parliamentary enclosure, with some enlargement of fields following introduction of arable crops. Local stone vernacular is visible in buildings and walls. Many sites of nationally and locally valued ecological importance, including former quarries, woodland and heath grasslands. Historic estate parklands add time-depth to the landscape. Long panoramic views are possible from numerous parts of the area."

Key landscape sensitivities to development within the area are identified as follows:

- The elevated, upland landscape, with distinctive rocky outcrops which are visible from long distances.
- Nationally and locally valued semi-natural habitats including heathland and wetland habitat.
- Well-wooded character, with large tracts of ancient woodland.
- The setting and integrity of historic estate parkland landscapes including Bradgate Park and Garendon Park (both Grade II Registered Parks and Gardens).
- Nationally important heritage features including hillforts and medieval fish ponds.
- Traditional nucleated settlements constructed of distinctive local stone.
- Long distance panoramic views, overlooking lower lying adjacent landscapes.
- The attractive, scenic qualities of the landscape, which make it a popular destination for recreation.



Chapter 4.0

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Chapter 4.0

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Physical Influences

Geology

The underlying geology of the Charnwood Forest area (see Figure 5), dates back to the Precambrian Period with some areas being 560-600 million years old. Volcanic eruptions from this time created the rocks of the 'Charnian Supergroup' which include fossilised evidence of primitive life which evolved at this time. Igneous rocks from this era are extracted from a number of quarries within the Charnwood area.

The early volcanoes were worn down by erosion during the Cambrian Period with Swithland Slate resulting from the sea depositing muddy material as it advanced over the land, around 530 million years ago. Quarried since Roman times, this slate features within the area, used as a roofing material, but is also found in the form of gravestones for example, as at Ratby churchyard.

The granodiorite intrusion at Mountsorrel (the Mountsorrel Complex) was formed within a subduction zone during the Ordovician period resulting in hard, medium to coarse-grained crystalline rock. This is being extracted at Buddon Wood (Mountsorrel) but has been worked in the area from late Neolithic times.

Towards the end of the Silurian Period, around 420 million years ago, two continental plates collided resulting in the formation of mountains. These formations are evident today as the Charnwood Hills.

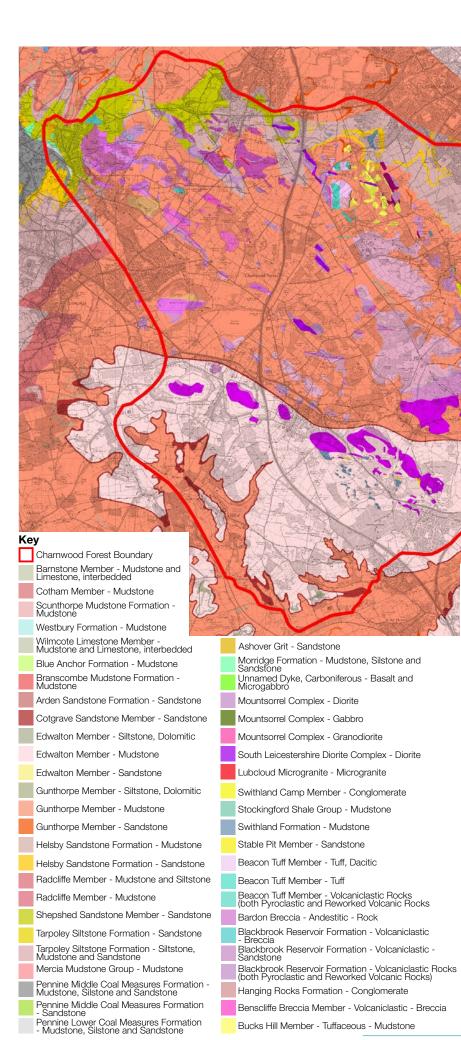
Within the northern parts of Charnwood Forest, areas of Carboniferous Limestone are evident, which date from the Carboniferous Period, 355 million years ago. These were formed as a result of sediments being deposited while the area was covered by a warm sea, as the landmass was located close to the equator at that time. This rock is only found in a limited area due to the majority of the area existing as a mountain range.

At the end of this period the area covered by the sea was replaced with a large delta which resulted in the accumulation of the Coal Measures. These areas lie to the west of the area, located within the Leicestershire coalfield.

Much of the Carboniferous rock was eroded throughout the Permian Period which lasted for around 40 million years. The erosion was irregular as a result of the landform but during the following Triassic Period, Charnwood became covered in sediments. This period resulted in the creation of Shepshed Sandstone and the Mercia Mudstone Group, formed later in the period which eventually covered the whole of the Charnwood mountains. Subsequent wind erosion has however resulted in the creation of 'tors' of granodiorite in some areas.

A tropical sea covered the area during the Jurassic and Cretaceous periods and by the start of the Quaternary Period, around 2 million years ago, much of the previous strata had been eroded. Glaciers moved across much of the country during the Anglian Ice Age 440,000 years ago, which left superficial deposits of sand, gravel and till as they retreated.

More recently, rivers have developed with associated floodplains consisting of clay and silt.



Bucks Hill Member - Tuffaceous - Sandstone Beacon Hill Formation - Tuff, Dacitic Beacon Hill Formation - Volcaniclastic - Breccia Beacon Hill Formation - Volcaniclastic - Siltstone Bradgate Formation - Metavolcaniclastic - Igneous - Rock Bradgate Formation - Volcaniclastic - Siltstone Charnwood Lodge Volcanic Formation - Pyroclastic-Breccia Charnwood Lodge Volcanic Formation - Volcaniclastic - Breccia Park Breccia - Volcaniclastic - Breccia Sliding Breccia Member - Volcaniclastic - Breccia Cademan Volcanic Breccoia Member - Pyroclastic - Breccia Grimley Andesite - Andesite Ives Head Formation - Tuffaceous - Sandstone Ives Head Formation - Volcaniclastic - Breccia Ives Head Formation - Volcaniclastic - Sandstone Kite Hill Tuff Member - Pyroclastic - Breccia North Charnwood Diorite - Diorite Outwoods Breccia Member - Volcaniclastic - Breccia Peldar Dacite Breccia - Volcaniclastic - Breccia Peldar Porphyritic Dacite - Dacite St Bernard Tuff Member - Volcaniclastic Rocks (both Pyroclastic and Reworked Volcanic Rocks) South Charnwood Diorites - Diorites Sandhills Lodge Member - Tuffaceous - Sandstone South Quarry Breccia Member - Volcaniclastic - Breccia

Swannymote Breccia Member - Volcaniclastic - Breccia

Sharpley Porphyritic Dacite - Dacite

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Soils

Soils are identified and described through the National Soil Map and Soil Classification (2004). The majority of the Charnwood Forest area is covered with soils which are slowly permeable, seasonally wet, loamy and clayey soils (soil type 711l) (see Figure 6). These are of low fertility and typically support seasonally wet pasture and woodland habitat and tend to have landcover consisting of grassland with some arable and forestry. Within the central areas, associated with the higher landform, soils are a similar slowly permeable, seasonally wet, slightly acid, but of a base-rich loamy and clayey soils (soil type 711m). These soils are of moderate fertility but support similar habitats to soil type 711l. These soils are also present in the south west of the area.

Beyond the central area, associated with lower lying landform extending to the north, east and south, soils are slightly acid, loamy and clayey soils with impeded drainage (soil type 572f, 572g, 572l). These are of moderate to high fertility and support a wide range of pasture and woodland types and typically

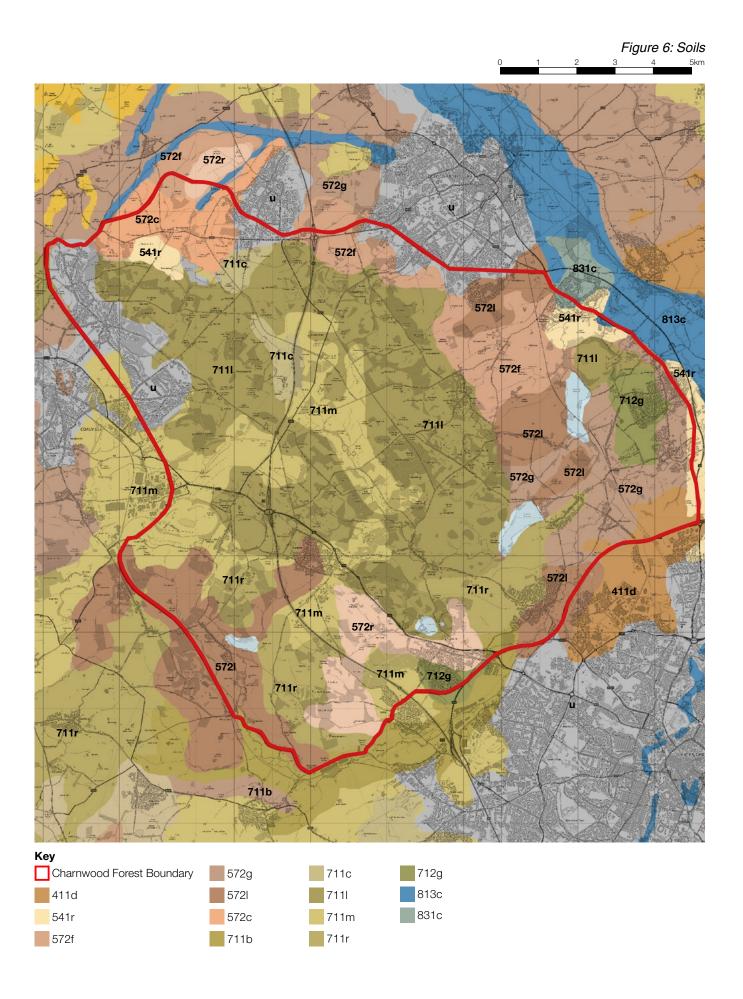
include arable and grassland landcover. Associated with these soils are small pockets of freely draining slightly acid loamy soils which are of low fertility (541r). These soils support neutral and acid pastures and deciduous woodland, as well as acid communities such as bracken and gorse in upland areas. Landcover associated with these soils tends to be arable and grassland.

To the south east, associated with Rothley Brook, is an area of lime-rich loamy and clayey soils with impeded drainage (soil type 411d). These soils are of high fertility and typically support arable landuses with some grassland.

On the periphery of the forest, associated with the River Soar corridor are loamy and clayey floodplain soils with naturally high groundwater (type 813c). These are of moderate fertility and support wet flood meadows with wet carr woodlands and typically have grassland with some arable land cover. Narrow fingers of this soil type protrude into the area from the north, associated with Black Brook and Grace Dieu Brook.

Soil Descriptions

- 411d Deep Clay Slowly permeable calcareous clayey soils.
- 541r Deep Loam Deep, well-drained, coarse loamy and sandy soils, locally over gravel.
- 572f Deep Red Loam to Clay Reddish mudstone fine loamy or fine silty over clayey soils with slowly permeable subsoils and slight seasonal waterlogging.
- 572g Deep Red Loam to Clay Reddish coarse and fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging.
- 572l Deep Red Loam Reddish fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging.
- 572c Silty over Red Shale Reddish fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging.
- 711b Seasonally wet loam to clayey over red shale Slowly permeable seasonally waterlogged reddish fine loamy over clayey soils.
- 711c Seasonally wet loam to clayey over red shale Slowly permeable seasonally waterlogged reddish fine loamy over clayey and clavey soils.
- 7111 Seasonally wet red loam over hard rock Slowly permeable seasonally waterlogged reddish coarse and fine loamy soils.
- 711m Seasonally wet deep red loam to clay Slowly permeable seasonally waterlogged reddish fine loamy over clayey, fine loamy and clayey soils.
- 711r Seasonally wet deep loam to clay Slowly permeable seasonally waterlogged fine loamy over clayey soils.
- 712g Seasonally wet deep clay Slowly permeable seasonally waterlogged clayey and fine loamy over clayey soils.
- 813c Seasonally wet deep clay Stoneless clayey soils variably affected by groundwater some with sandy subsoils.
- 831c Seasonally wet deep loam Permeable fine and coarse loamy soils variably affected by groundwater, the drier soils being on slightly raised sites



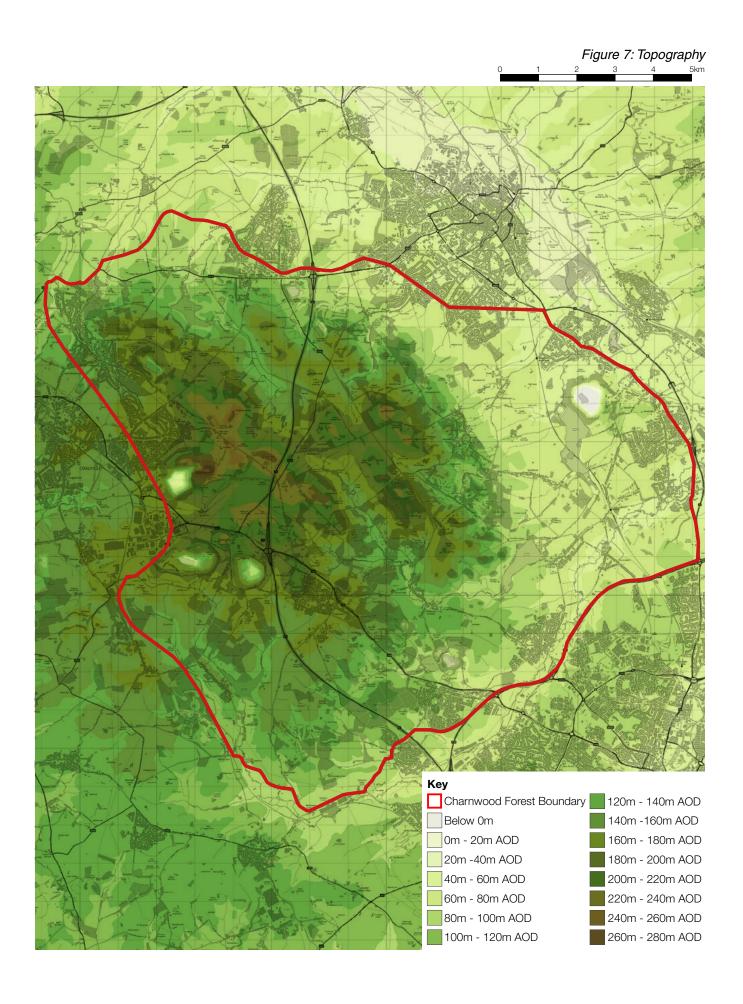
OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Topography

The topography of the Charnwood Forest area is distinctive with variety and contrast. The central upland areas contrast with the lower lying peripheral areas (see Figure 7).

The central area is elevated and includes areas of heathland and rough grassland with rocky outcrops. This area forms the highest land in Leicestershire and is a distinctive feature within the wider county which generally consists of lower, flatter land. It is a feature of the area that contrasts in landform are created often associated with quarrying, with deep quarries created on areas of high land. This is prevalent towards the west and is evident at Bardon Hill, which has the highest point in the area, reaching 278m Above Ordnance Datum (AOD), with the neighbouring quarry forming a major earthwork and deep excavation. This contrast in landform is also evident at Stanton-under-Bardon where Billa Barra Hill reaches 235m AOD and lies adjacent to Stanton-under-Bardon Quarry and also at Markfield where there is a contrast between Hill Hole Quarry and the adjacent hill. The raised landform forms two 'ridges' which run north west to south east separated by a gentle valley, broadly associated with the Black Brook watercourse and the watercourse leading to Cropston Reservoir. Further high points located within this central area are found at Beacon Hill, which reaches 248m AOD and Old John Tower within Bradgate Park.

Landform generally falls to the north, east and south. A rolling landform is evident within the eastern part of Charnwood Forest towards the more settled edges on the outskirts of Loughborough, Quorn, Mountsorrel and Rothley. A lower, flatter valley runs north east to south west along the south east edge of the forest, linking Groby, Anstey and Rothley which is associated with the Rothley Brook corridor. To the north, landform is again more undulating and falls towards the more typical lower plains beyond.



OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Hydrology

The pattern of water courses and water features within Charnwood Forest is closely associated with the topography with a number of streams and brooks with associated reservoirs draining from the central high ground into the River Soar to the north east and east. Land use has also had an influence, with a number of pools and lakes forming in former quarries (see Figure 8).

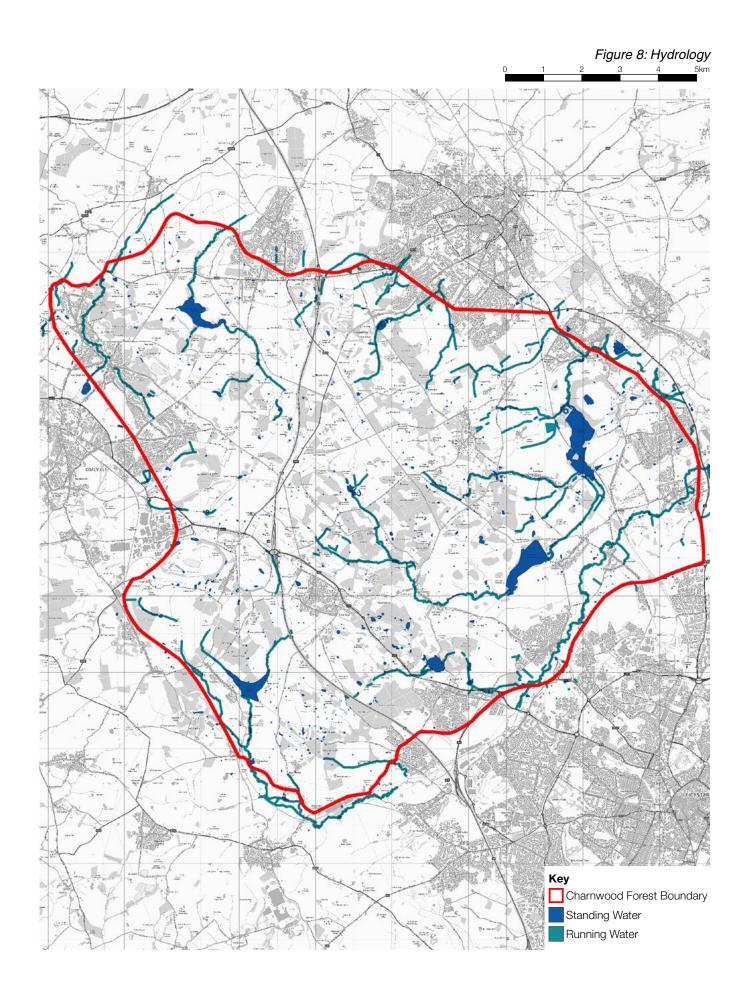
The flow of water creates an overall pattern of watercourses radiating out from the central higher landform. The source of the River Lin is located centrally, within Ulverscroft, at the heart of Charnwood Forest. The river flows through Newtown Linford and Bradgate Park and feeds both Cropston and Swithland Reservoirs, before joining the River Soar at Quorn.

Grace Dieu Brook and Black Brook flow north then east around Shepshed towards Loughborough and Burleigh Brook and Wood Brook also flow north east through Loughborough. Rothley Brook and associated tributaries create a network of watercourses flowing east then north east with the brook itself flowing through a wide floodplain which defines the south eastern edge of Charnwood Forest.

All of these watercourses eventually join the River Soar which flows through a broad low lying flood plain north west to south east around Loughborough and through the villages along the A6 corridor including Quorn, Mountsorrel and Rothley.

Reservoirs form large influential features throughout the area and include Blackbrook in the north, Thornton in the south with Cropston and Swithland located to the east. Thornton, Cropston and Swithland were all constructed in the 19th century and have associated distinctive features. Railings around Swithland are extensive and distinctive while associated buildings are typical red brick Victorian style.

Elsewhere, numerous field ponds are scattered throughout the area.



OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Ecology

The distinctive geology and landcover within Charnwood Forest results in a rich ecology, with a wide variety of biodiversity including Biodiversity Action Plan (BAP) priority habitats, supporting a range of threatened species including European Protected Species.

The Charnwood Forest NCA states the following regarding species of significant interest;

"Nationally important species found here include the spreading bellflower and species of dead wood beetle and the Charnwood spider.

Hay meadows and pastures rich in wildlife can be found on the fertile soils of the valley bottoms. They are particularly important for wild flowers and for the butterflies and moths they support. Locally rare flowers include the fragrant orchid found in only one site." 3

Charnwood Forest includes many BAP Priority Habitats including Purple Moor grassland, lowland meadows and lowland dry acid grassland. There are also areas of lowland heath mainly within Bradgate Park but also at Beacon Hill, Charnwood Forest Golf Club, Longcliffe Golf Club, as well as at Charnwood Lodge (see Figure 13).

There are also some small areas of wetland including Lowland Fens and reedbeds.

Extensive areas of woodland habitats are prevalent across Charnwood Forest including wet woodland and lowland mixed deciduous woodland. BAP Priority Wood pasture and Parkland habitats are also evident, at Bradgate Park and south of Quorn.

Ancient woodland is also extensive throughout the area although the National Forest influence is prevalent in the south west with extensive mixed woodland plantations. The country parks have a wealth of hedgerows and veteran trees including areas of ancient woodland.

A large National Nature Reserve is located at Charnwood Lodge and managed by the Wildlife Trust (see Figure 9).

This site covers an area of 197 ha and includes a mix of valuable habitats including mixed woodland, acid grassland, heath grassland as well as a small reservoir and a number of small ponds. The site contains the prominent 600 million year old Precambrian rocky outcrop which is internationally significant and protected by the National Nature Reserve designation. The elevated wild landscape and presence of exposed rocks combined with rough grassland enclosed by stone walls provides a protected area of distinctive character within the Charnwood Forest area.

There are three Local Nature Reserves in Charnwood Forest including Billa Barra Hill Nature Reserve adjacent to Bardon Hill Quarry, a small area at Halstead Road Centenary Pasture on the western edge of Mountsorrel and Morley Quarry to the south of Shepshed.

An extensive network of nationally designated SSSIs spread across Charnwood Forest with 22 currently located within the area. A substantial amount of this SSSI land cover is associated with broadleaf mixed woodland combined with mosaics of heathland, lowland or acid grassland, such as at Bradgate Park, Beacon Hill, Grace Dieu, the Outwoods and Charnwood Lodge, with many designations also associated with ex-quarries and reservoirs such as Mountsorrel Quarry, Bardon, Cropston, and Swithland.

The SSSIs are broken down into individual units. At the time of publication there are a total of 128 SSSI units located within the forest. Of these, around 30% are identified as being in a 'favourable' condition. 12% are identified as being 'in decline' such as Jubilee Wood and a section of Beacon Hill mixed broadleaved habitats, sectors of Grace Dieu & High Sharpley heathland and Blackbrook and Cropston Reservoirs, although 45% are identified as 'recovering'.

Numerous Local Wildlife Sites are identified within the forest, which reflects the richness of ecology and the variety and diversity of habitats and geology prevalent across the Charnwood Forest character area.

³ From NCA Profile 73. Charnwood page 24 and 56

Figure 9: Environmental Designations Charnwood Forest Boundary National Forest Boundary National Nature Reserve Sites of Special Scientific Interest (SSSI) Local Nature Reserve (LNR) Local Wildlife Site (LWS)

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Human Influences

Archaeology and Cultural Heritage

Historic Background

Charnwood Forest has been an important centre for human activity since Prehistoric times with early evidence of settlement and exploitation and distribution of its natural resources. An important discovery dating back to the Upper Palaeolithic period was made at Bradgate Park in 2013 where evidence of an open air camp was identified with thousands of scattered flints unearthed. This important find provided evidence of open air living where previous evidence had always been found inside caves.

During the Neolithic period, hand axes were made from local stone and wood. Tools from this period, made from Charnwood's distinctive stones, have been discovered in Derbyshire and as far as East Anglia and the Fen Edge.

Roman activity resulted in the establishment of towns and a complex road system as well as further quarrying. Swithland Slate and granite from Mountsorrel, Hill Hole and Groby were used as construction materials in Leicester City, with Charnwood stone also found further afield in the excavation of Roman villas in Nottinghamshire and Lincolnshire.

Anglo-Saxon activity is mainly restricted to the edges of the forest and there is evidence of Scandinavian influences in the area through place names such as Groby ('Groo' being the Viking word for 'pit' and 'by' being a common Scandinavian element in English place names)⁴.

Further colonisation of Charnwood occurred during the 12th and 13th centuries with many newer settlements closely related to existing ones on the edge of Charnwood, such as Newtown Linford which is a daughter settlement of Groby.

⁴ From Groby Parish Council website www.groby.com

The medieval period resulted in the settlement of a number of monastic orders and the introduction of hunting parks to the area. Monastic orders settled at Ulverscroft Priory, which was founded between 1134 and 1150; Charley Priory founded in 1190; and Grace Dieu Priory which was founded in 1230. A number of deer parks were established with 12 identified within the forest area. The earliest of these was established at Quorn before 1163 with others located at Bardon, Beaumanor, Bradgate, Burleigh, Grace Dieu, Groby, Ratby, Rothley, Shepshed as well as nearby Belton and Loughborough.

Extensive changes to the landscape came about as a result of the Enclosure Acts of the 18th and 19th centuries. Thousands of acres of heathland were lost to be cleared and drained for farmland with boundaries demarcated as hedges or stone walls. The process of enclosure began as early as 1759 with Enclosure Acts awarded at Loughborough and Anstey in 1762 and many acts being awarded over the following years. The most extensive change was through the enclosure of Charnwood Forest and Rothley Plain which resulted in over 11,000 acres of wastes and common lands being enclosed in 1829.



Grace Dieu priory in Thringstone

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Quarries and Reservoirs

The expansion of quarrying and subsequent construction of canals within Charnwood Forest led to changes in the forest character. Quarries at Mountsorrel and Shepshed expanded in the 18th century with aggregate transported countrywide along the Soar and Wreake Navigations and the former Charnwood Forest Canal. The developing slate industry went into rapid decline in the 1840's due to an increase in competition from Welsh slate which was thinner and lighter.

The number of historic quarries in the area has had a considerable effect on the development of the character and aesthetic of settlements, especially to the east of the M1. The local vernacular is defined by Swithland Slate and Mountsorrel Granite. Many of the smaller scale quarries are visually obscured by woodland on the steep slopes surrounding the craters.

Man-made reservoirs are prevalent within Charnwood Forest with Swithland, Cropston and Thornton all being constructed in the late 19th century. Blackbrook Reservoir was constructed in the 18th century to feed the Charnwood Forest Canal but had to be altered and replaced with a gravity dam in 1906. The waterbodies are important features for wildlife with Groby Pool, Swithland and Cropston Reservoirs all being SSSIs, important for wetland birds.

Great Central Railway

The Great Central Railway passes through the eastern side of Charnwood Forest. The railway was originally opened to passengers in 1899, but closed in 1966 due to a decline in use. The line was re-opened as a tourist attraction in 1969 and now runs as a main line heritage railway. The railway is popular with local residents and visitors from further afield. As the steam engine travels through the eastern portion of the forest, it leaves a trail of steam adding to the historic character of the area.

Historic Features

Scheduled Monuments

There are two significant Scheduled Monuments (SM) within Charnwood Forest, at Beacon Hill and Bradgate House. The SM site at Beacon Hill is the only surviving example of this class of slight univallate hillfort in the county. Finds from the site, including a founder's hoard, indicate its use as a centre for production, refuge or trade.

Bradgate House SM is located within a medieval deer park, which was enclosed by 1241. Notable later improvements include 18th century stone walling and plantations which survive today as a public park. Within the park are the ruins of Bradgate House, a brick mansion built somewhere between 1450-1520 and abandoned in the 18th century, as well as the earthworks of the associated garden. Additionally, the Scheduled Monument remains of a Moated Lodge are located 200m to the west of Bradgate House.



Bradgate House within Bradgate Park

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Other SM's identified in the area include Packhorse Bridge at Anstey, a bridge crossing at Rothley Brook, the Market Cross in Mountsorrel which forms a monument in the centre of the village and Rothley Cross at Rothley. Further moated remains are scheduled in Bardon and Quorn, whilst the remains of a hill fort are also designated as a Scheduled Monument in Woodhouse Eaves. The remains of Whitwick Castle, Groby Castle and Mountsorrel's motte and bailey castle are all Scheduled Monuments. The hill upon which Mountsorrel's motte and bailey castle was originally positioned is a prominent local feature with a beacon. war memorial and seating area overlooking the River Soar Valley. At Christmas, the cross on top of the Grade II Listed War Memorial on Castle Hill is lit and is visible from much of the surrounding area to the south.

Listed Buildings and Conservation Areas

There are 14 Conservation Areas within Charnwood Forest. These are located within Woodhouse Eaves, Swithland, Rothley Ridgeway, Ratby, Rothley, Quorn, Newtown Linford, Mountsorrel, Markfield, Groby, Thurcaston, Cropston, Woodhouse and Anstey. Other settlements in the area such as Whitwick, Bardon and Thringston have a number of Listed Buildings but no designated Conservation Area.

Figure 10 shows the location of Listed Buildings and Conservation Areas within Charnwood Forest. The figure highlights a pattern of Listed Buildings with a greater number shown in the east than the west, although there is a cluster in the north west within the centres of Thringstone, Whitwick and at Grace Dieu.

Grade I listed features within the forest include Ulverscroft Priory, the Mountsorrel Cross in Swithland, Rothley Court Hotel and Chapel, the Church of St Bartholomew and Farnham Chapel in Quorn, as well as the Church of St Peter in Thornton. Other Listed Buildings of note include Quorn Hall, Beaumanor Hall, Swithland Hall and Stoneywell, which is an Arts and Crafts cottage now owned and managed by the National Trust.

Registered Parks and Gardens

As many as twelve hunting parks were introduced in Charnwood Forest during the medieval period. At the end of the medieval period, a number of larger 'country houses' were developed, set within formal parkland landscapes. This includes Bradgate House which was built in the 15th century. The remains of the house are still evident within Bradgate Park which is a Grade II Listed Registered Park and Garden. The park was first enclosed as a deer park (for hunting) in the 12th century and herds of Red and Fallow Deer still roam freely across the park's 800 acres today. Bradgate House was one of the first unfortified, brick-built country houses in the country. It was the childhood home of Lady Jane Grey and played an important role in the English Civil War but was later abandoned in the 18th century. Now, the ruins of Bradgate House, Swithland Wood and Old John are all prominent features within the park with Cropston Reservoir immediately adjacent, adding to the richness of the cultural heritage of the site. The accessibility of Bradgate Park allows it to be an incredibly popular local visitor attraction.

Figure 10: Heritage Designations Charnwood Forest Boundary National Forest Boundary Registered Park & Garden Ancient Monuments Conservation Area Listed Buildings

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

Settlement Pattern

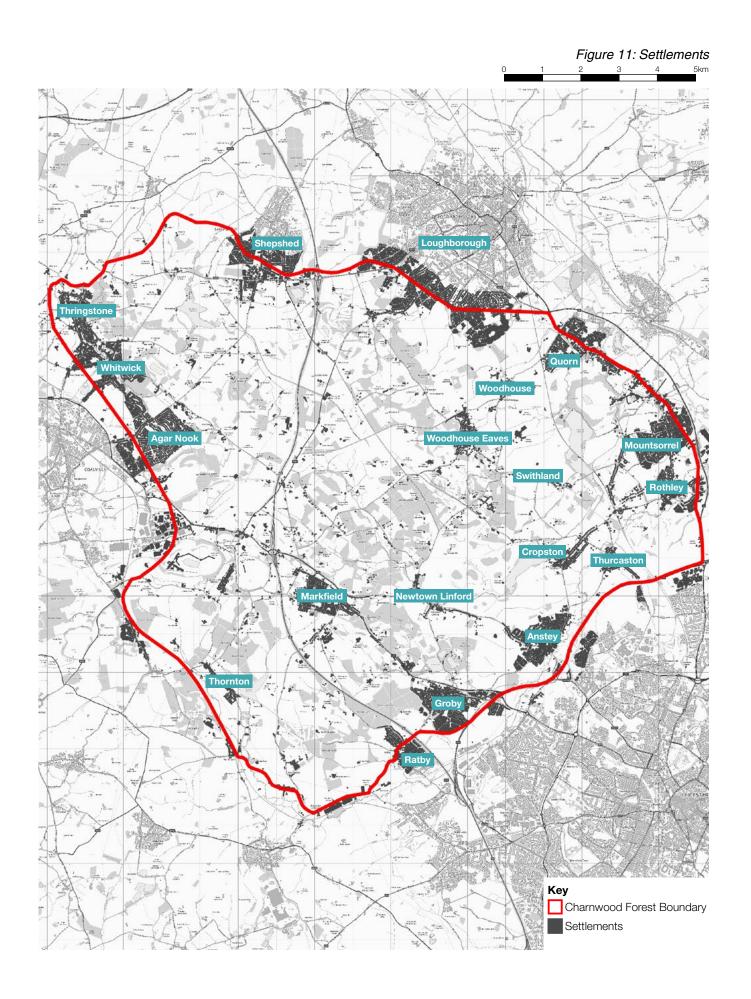
A detailed review of the characteristics of settlements within Charnwood Forest is included at **Chapter 6**. The following provides an overview of the settlement pattern within the Charnwood Forest area (see Figure 11).

The overall pattern of settlements within Charnwood Forest is that larger settlements generally form a ring around the central forest area, with scattered farms and individual large properties spread through the central areas. This pattern relates to the landform, with the larger settlements located on the peripheral lower lying, generally flatter areas while the central raised and more undulating areas remain un-developed. The one exception is Markfield village which is a large clustered settlement located at an elevated position between the M1 and A50.

The villages within Charnwood Forest are predominantly of a linear form, developing along the roads through the area. This pattern is distinctive in many of the smaller villages such as Stanton-under-Bardon, Thornton, Swithland, Cropston, Newtown Linford and Woodhouse which have not significantly expanded over time. Many of the peripheral settlements have developed and expanded such as Thringstone and Whitwick, Groby, Anstey, Rothley, Quorn and Mountsorrel. Settlements have also developed along floodplain corridors such as Quorn, Mountsorrel and Rothley which follow the River Soar corridor and Ratby, Groby and Anstey which follow the Rothley Brook corridor.

The villages within the forest are all distinctive and relate to the local complex geological patterns through the use of locally sourced building materials which creates localised patterns. Local granites and slates are common building materials, with some use of red brick. All three materials are used in varying degrees within the larger peripheral villages of Quorn and Mountsorrel while granite and Swithland slate are used predominantly within the more central villages such as Woodhouse Eaves, Woodhouse and Swithland. To the south west, Thornton and Botcheston exhibit a greater use of red brick within feature buildings.

Modern expansion has occurred within the settlements to varying degrees. Many of the central villages remain relatively small and have only experienced small scale or infill development, while the peripheral villages including Quorn, Mountsorrel and Rothley, as well as Thringstone and Whitwick, have expanded significantly over recent years. Settlements on the south eastern edge at Anstey, Ratby and Groby have also expanded due to their close proximity to the edge of Leicester City.



OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

More Recent Influences

Mineral Extraction

The extraction of minerals from Charnwood Forest has been a major influence on the changing landscape for thousands of years. The complex geology which includes a mix of Precambrian and sedimentary rocks overlain by sediments (drift geology) has led to a large number of quarries in the area. Three large quarries are still active (Bardon Hill, Mountsorrel and Cliffe Hill) while numerous quarries of varying scales are disused but form distinctive features within the landscape and provide valuable habitats for wildlife.

Historically, quarrying in the forest has been evident since Neolithic times; stone for walls and buildings was extracted during Roman times and aggregate used for structures during medieval times. Aggregate has also historically been used for road construction in the area. The construction of the railways through the area in the 19th century, including the Great Central Railway, both created an increased demand for aggregates as well as an efficient means of transportation.

There is still demand for stone and aggregates extracted from Charnwood and the three active quarries are still expanding. This results in a constantly changing landscape as pits and spoil heaps expand but also as areas which have now been restored mature with habitats establishing and biodiversity developing.

Infrastructure and Connectivity

The M1 forms the major transport route through the forest heading north to south through the area. Despite the scale and importance of the major transport corridor, the motorway is not always the dominant feature that it potentially could be. As a result of the landform, the road often passes through a cutting and planting on the embankments has matured to create screening and the road corridor is not often visually dominant within views across the area. A greater influence is created through noise with constant background traffic noise spreading into the central forest areas.

Secondary 'A' roads crossing the area are limited to the A50/511 and A512 which both lead east to west across the M1 and link Loughborough and Leicester in the east to Coalville and the M42 in the west. Otherwise minor roads cross the area as lanes. These are often straight and almost create a grid-like pattern across the area.

Two railway lines pass through Charnwood Forest. A freight line follows the south western boundary of the forest, linking Bardon Hill Quarry with Leicester and Burton-upon-Trent. The Great Central Railway is a heritage line which runs between Leicester and Loughborough through the eastern part of the forest, with stations at Quorn and Rothley. The railway is the only double track heritage line in the UK with steam and heritage diesel trains running regularly throughout the year.

The area is well served by Public Rights of Way (PRoW) with numerous footpaths and bridleways creating a network across the area. There are however slightly fewer routes through the most central parts of the forest although these areas are well served through areas of open access land and woodland with informal tracks and paths. Three recreational long distance routes cross the forest, including the Leicestershire Round, the Ivanhoe Way and the National Forest Way (see Figure 12).

Leicestershire Round Charnwood Forest Boundary Great Central Railway М1 A Road -- National Trail -- Public Right of Way - Bridleway

Figure 12 Road, Rail and Public Right of Way Network

OVERVIEW OF THE LANDSCAPE CHARACTER OF CHARNWOOD FOREST

The pattern of PRoW routes is interesting when compared to Strava Heat Maps². These maps are generated through public use and show the 'heat' or activity of members of the public undertaking walking, cycling or swimming activities. The heat map identifies a high level of activity within the main settlements which are locatable on the periphery of the area as well as along connecting roads. There is also a high level of activity within Bradgate Park (see extract below). Beacon Hill and the Outwoods with slightly lower levels of activity within woodland areas such as Martinshaw Wood and Swithland Wood (see extract below).



Bradgate Strava Heat Map



Swithland Wood Strava Heat Map

Landcover and Vegetation

Landcover within Charnwood Forest is complex but is generally made up of a mix of arable and pastoral land, woodland, heathland and areas of quarrying as well as a number of large waterbodies (see Figure 13). An overall pattern emerges which closely relates to the topography of the forest. The more central upland areas feature a greater covering of grassland or pasture with extensive woodland, much of which is ancient woodland. These areas also feature heathland, which is most extensive at Bradgate Park but also found at Beacon Hill/Charnwood Lodge and within golf courses. The lower lying land towards the periphery of the forest has a greater coverage of open arable fields with a lower extent of woodland. The large reservoirs are also located towards the periphery of the forest area.

Woodland cover includes a majority of broadleaved woodland but with some coniferous, mainly located within the elevated, central areas at Ulverscroft, but also around Bardon Hill Quarry and at Beacon Hill. Whilst the majority of the centrally located woodlands are identified as Ancient Woodland and Ancient Replanted Woodland, ancient woodland is found throughout the whole of the forest area. Martinshaw Wood is a large ancient woodland on the outskirts of Groby and Ratby which is bisected by the M1 corridor.

A greater extent of new woodland plantation is found within the south west of the forest which is a result of National Forest initiatives in this area.

² Strava Heat Map is used under Open Database Licence and taken from https://www.openstreetmap.org/

Key Charnwood Forest Boundary Built Up Areas Arable Grassland Gardens Heathland Quarry Standing Water Woodland Ancient Woodland

Figure 13: Landcover and Vegetation

