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**Appendix 1:** Archaeological LiDAR study and Walkover Survey, Bradgate Park

**Appendix 2:** Archaeological Test Pit Evaluation at Bradgate Park

**Appendix 3:** Bradgate Park Landscape Tree Survey
Executive Summary

Bradgate Park lies five miles northwest of Leicester and represents a rare survival of a Medieval deer park, dating back to at least the mid-13th century, with a distinct upland character in a lowland setting. The park has a rich history and multiple significances, including a unique geology with some of the oldest rocks and fossils in England, an outstanding collection of veteran and ancient trees that provide an invaluable ecological resource, and a diverse archaeological record that includes an internationally important Late Upper Palaeolithic site. The park is designated as a SSSI for its ecological importance and is included at Grade II on the English Heritage Register of Parks and Gardens of Special Historic Interest. The ruins of Bradgate House, both a Scheduled Monument and Listed Building, provide an evocative centerpiece to the site, being the birthplace of Lady Jane Grey, the ‘nine days Queen’.

The park was bought by local industrialist Charles Bennion in 1928 and donated in perpetuity as a place of recreation for the people of Leicestershire. Today the park is administered by the Bradgate Park Trust and enjoyed by a multitude of local residents and other visitors who come to relax, exercise, escape, explore and discover. Like any landscape there are factors affecting the park requiring consideration and management, the primary issues including the control of bracken, which dominates the area and denudes the ecological interest of the park if left unchecked, the management of high visitor numbers and their impacts upon the landscape, the conservation of the veteran tree population, the management of the deer herd, and the conservation and understanding of the archaeological record.

This Parkland Plan has been commissioned in order to inform a new Higher Level Stewardship (HLS) Agreement for the park being funded by Natural England, as well as to guide its overall management for the next ten years and beyond. The study brings together existing research and new survey in order to provide a comprehensive overview of understanding for the park, with all interests and significances considered and assessed, before identifying any issues affecting these and proposing management solutions to address them. Specialist surveys undertaken as part of this study include a comprehensive tree survey, LiDAR survey and analysis and a test-pit survey of the internationally important Upper Palaeolithic Site.

Proposals include a targeted program of bracken clearance through combined mechanical and chemical methods in order to achieve the long term enhancement of the SSSI whilst also helping to conserve the archaeological record and enabling further research. Further survey of the Upper Palaeolithic Site is also being funded through HLS to preserve by record the known Creswellian deposits before they are lost to erosion, alongside broader archaeological survey of the area. Other proposals to be funded under the HLS scheme include the management of targeted veteran trees, a programme of ditch blocking to re-wet areas of wet heath for ecological benefits, and enhanced interpretation of the park to help bring it alive to visitors.

Ultimately the Plan serves to guide cohesive management of the park so that its multitude of interests and significances are conserved and enhanced for the benefit of the people of Leicestershire and beyond and for future generations.
1. Introduction

Site Background and Purpose of the Plan

1.1 Bradgate Park is situated in Leicestershire, five miles northwest of Leicester and six miles south of Loughborough and within the area of the Charnwood Forest. The park extends to approximately 325ha and falls within the parish of Newtown Linford, with some land also within the neighbouring parishes of Anstey and Thurcaston & Cropston. The site stands as a rare survival of a Medieval deer park, dating back to at least the mid-13th century. The park has been continuously occupied by deer since this time (although they are no longer hunted for sport), whilst the collection of veteran and ancient trees within the site include specimens that are over 500 years old. An Elizabethan manor built within the park c.1500 was abandoned c.1740, and now stands as an impressive ruin at the heart of the site. Significantly this meant that the park was never landscaped in the style of Lancelot ’Capability’ Brown, as was the fashion for the major estates during the second half of the 18th century. Instead the park was kept on by the Grey family as a place primarily for the pursuit of sport, including the hunting of deer, the racing of horses and later the shooting of game birds.

1.1 Today the park is administered by the Bradgate Park Trust as a place of recreation for the people of Leicestershire, bought by local industrialist Charles Bennion in 1928 and donated in perpetuity for such a purpose. The importance of the park is recognised in its registration at Grade II on the English Heritage Register of Parks and Gardens of Special Historic Interest, which attributes “special interest, warranting every effort to preserve them”, whilst the ruin of the Elizabethan house and gardens is designated as a Scheduled Monument. The study area includes the full extent of the Registered Park & Garden, which covers the extent of the park as it is today following expansion and contraction throughout the centuries (see Figure 1.1 below).

Figure 1.1: Study Area boundary
The Bradgate Park Trust commissioned Cookson & Tickner in 2013 to prepare a Parkland Plan in order to inform a new Higher Level Stewardship (HLS) Agreement for the park being funded by Natural England, as well as to guide its overall management for the next ten years and beyond. This plan combines new research and survey with the information and research that already exists for the estate, drawing together all the available information and presenting the key significances and issues for the estate as a whole, before presenting a series of integrated proposals for its management. Unnecessary duplication of work has been avoided where possible, although previous assumptions have been challenged where necessary. The ultimate purpose of the plan is to protect and enhance the conservation interests of the estate and guide future change and ensure integrated management for the future.

Structure of the Plan

1.3 The plan is divided into a series of chapters that first present an understanding of the property and its significance, followed by an analysis of the main issues facing the various layers of significance, before outlining a vision for the whole property and a management approach for its component parts.

Chapter 2 provides information on the current management context for the property, including statutory designations, current management arrangements, rights of way and a summary of current use.

Chapter 3 summarises the historic development of the property as a whole, looking at its main phases of development starting from the early settlement in the area through to major events in its history that led to changes in the landscape.

Chapter 4 goes on to explore the site in greater detail, providing a detailed examination of the existing landscape according to each of the component character areas. For each character area this chapter addresses the following: archaeology, trees and woodland, ecology, views and circulation, and visitor offer, before providing a summary of the area’s significance and key issues.

Chapter 5 provides a summary of the key issues affecting the park by theme.

Chapter 6 provides a summary of the overall significance of the property.

Chapter 7 sets out an overall vision for the future management of the property followed by the proposed approach to management of the site, including conservation management actions by character area and a graphical masterplan illustrating the management proposals.

Chapters 8-9 will detail the Schedule of Works to be implemented under the HLS agreement in order to enact the management proposals, with associated descriptions.

Chapter 10 will provide details of the procedures to be followed in the implementation of this Plan.

Key References & Research

1.4 Information for the plan was gathered from a numbers of sources, including through site survey and analysis of existing documents. Sources were collated from a variety of locations, including the Enville Hall Archive, the Bradgate Park Trust, the English Heritage Archive and the British Library. Extensive historical research has previously been undertaken by local historian Anthony Squires, whose publications form key references for the historic development section of this report. A full list of references consulted during the study is provided at the end of this report. Some of the key references used in the preparation of this plan are highlighted below, followed by a brief description of the surveys that were undertaken as part of the plan process.

Maps/illustrations:

- Illustration of Bradgate Park by Leonard Knyff, c1700
- Bradgate Park Estate Map by Nicholas Kiddiar, 1746
- ‘Plan of Bradgate’, 1774
• 1st Edition Ordnance Survey, 1888

Publications/reports:


Site Survey:

• Landscape survey – a visual survey and analysis of the current landscape was undertaken by the authors to understand the relation of the current landscape to previous historic design phases and how it functions today, and to identify any management issues apparent in the landscape.

• Archaeology survey – the University of Leicester Archaeological Society (ULAS) carried out a walkover archaeological survey of the park following a LiDAR survey specially commissioned for this plan, to update and add to the known archaeological features within the site and provide a comprehensive gazetteer. A separate project to investigate a known prehistoric site within the park was also undertaken.

• Tree survey – this was undertaken by arboricultural specialist Ben Rose, with all trees within the park plotted and recorded, with information for each tree including species, location, condition, and further management guidance where required.

• Ecology Survey – following a review of existing ecological information, ecologist Rob Hutchinson carried out a field survey to verify and update existing data, recording any significant changes along with details of the habitats and characteristic plant species present, and potential protected species interest.
2. **Background Information & Management Context**

**NATURAL CHARACTERISTICS**

**Topography and hydrology**

2.1 The topography of Bradgate Park is characterised by land sweeping up from the River Lyn (Lin) to the north and northwest. The land rises from c. 80m AOD at Cropston Reservoir and 100m AOD near the site of Bradgate House to the northwest to 130m AOD and 150m AOD at the distinctive Bowling Green and Dale Spring spinneys respectively before concluding at Sliding Stone enclosure (170m AOD) near the north park boundary and over 200m AOD at the viewpoint near Old John in the far northwest. These high points, connected by sloping moorland, provide expansive views out to the south and east towards Leicester and the river valley of the Soar and north towards Loughborough. The River Lyn flows through the park to the south of the house site where, to the south, the land rises again through the deer sanctuary to a high knoll in the southwest at 130m AOD. The rocks beneath Bradgate Park are, in effect, a ‘young mountain range’[^1], their distinctive geology forming the craggy horizons so easily identified within the wider Charnwood landscape.

![Map of Bradgate Park](image)

*Figure 2.1: Bradgate Park topography and hydrology map*

2.2 Charnwood Borough receives between 750mm – 625mm average rainfall per annum with the highest rainfall occurring over the western area, which includes Bradgate Park. Wet heath is an important part of

the ecology of the park with the light soil needing support to prevent excessive drainage, which can wash out and erode the ground. The main drain through the park is the River Lyn, which flows east from the village of Newtown Linford into the Cropston Reservoir. The course of the river within the park has been altered over time to serve the needs of the estate. The remains of a dam survive toward Newtown Linford to the southwest of the house site together with a leat/conduit, which carries water north over 800m to the large triangular millpond, which supplied water to the house and provided a head for a mill which stood to the east of the gardens. Historian John Leland commented on this engineering work in 1539, commending the 'good and vigorous water supply'. The dam forms part of a string of four irregularly shaped fish ponds, later adapted into silt traps in the c. 1870 as part of the construction of Cropston Reservoir.

2.3 A system of ‘floating meadows’ was also established to the south of the river and south of the house in c.1821, where a second leat in flow enabled a permanent trickle of water down over the ground to help improve fertility through the river silt in an effort to increase winter forage. In order for this system to work, the ground had to be cleared of anthills, rocks and bracken with any hollows being carefully infilled. Elsewhere, waterbodies have established themselves in the park, most notably in the moat around the medieval moated house site to the west of the house site, which fills by surface runoff although some evidence survives of a third leat which may have linked the moat with the river.

2.4 The Cropston Reservoir is one of the largest water bodies in Leicestershire built specifically to improve the public health of Leicester in the late nineteenth century. The reservoir has a surface area of approximately 106ha and a capacity of 2,200m3.

2.5 The reservoir is held back by a dam 700m long. When drained in 1988 the Bradgate silt traps contained a noted lack of mud within the basin. This was due, in part, to earlier work in 1965 to reduce shallow water along the edges of the reservoir to help improve water quality. The current depth of sediment in the reservoir is understood to be c.7.5cm.

Geology

2.6 The rocks of Charnwood Forest are among the oldest recorded in England and Wales and include exposed ‘basement rocks’ across Bradgate Park. The fossil record within the park dates to late Precambrian, 543-580 million years, containing rare evidence of multi-celled, soft-bodied sea animals, known as ‘Ediacaran fauna’, the oldest fossils in England, which are contemporary with others found in Australia, Canada, Russia, China and Namibia. These fossils, which were first identified in 1957, include discoid impressions and frondose organisms (Bradgatia linfordensis). Charnia masoni was discovered at a separate site outside Bradgate Park in 1957, whilst Bradgatia linfordensis was found much later at Bradgate Park and is very significant as it is one of several fossil holotypes at the Park. The holotype is the first described specimen and it is these specimens which make Memorial Crags unique. The fossils are associated with specific rock strata which are exposed at various locations in Charnwood; the Thringston fault happens to occur in Charnwood Forest where at certain localities the rocks on one side have accessible fossils while rocks on the other side the fossils are buried deeper in the ground.

2.7 Bradgate Park has four Geological Conservation Review (GCR) sites, which were the basis for the inclusion of their nationally important geological features in the SSSI designation. The sites are site 1061 Bradgate Park (Precambrian England and Wales), site 2348 Bradgate Park (Quaternary of Midlands – Avon), site 2196 Memorial Crags (Precambrian palaeontology) and site 2197 Old John (Precambrian palaeontology).

2.8 The variety and form of the geology within Bradgate Park is an important resource for education whilst also contributing to its rugged, picturesque character, and published sources concerning the local geology date to at least 1790. The park is a geological SSSI and a number of individual sites within the park are candidate RIGS/LGS (Regionally Important Geological Sites/Local Geological Sites), as identified in the list of key geological assets below.

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2 McGrath A., A Geological Walk around Bradgate Park & Swithland Wood, BSO, 2004
2.9 The Charnwood rock, the Charnian Supergroup, is subdivided into three main types:

i. *The Blackbrook Group* – the oldest group but one not exposed at Bradgate Park.

ii. *The Maplewell Group* – most commonly seen at Bradgate exposed as tuffs (composite volcanic ash) and volcanic breccias (composite angular volcanic rock fragments). These include the Tuffaceous Pelites Member of the Beacon Hill Formation, the Sliding Stone Slump Breccia Member and Hallgate Member, which compose the Bradgate Formation. The Hallgate Member is the main source of Ediacaran fauna. This volcanic activity was increased by the proximity of these rocks to a ‘volcanic arc’, rock under extreme pressure at the edge of the ancient Gondwana continent, created by the movement of opposing tectonic plates similar to the present day situation in the Caribbean. The volcanic arc ran south from modern day Nuneaton.

iii. *The Brand Group* – sedimental rock which overlays the Maplewell Group. Evidence of trace fossils (Teichichnus) has been found which suggest that these rocks are actually Cambrian and not Precambrian as previously thought. This includes the Stable Pit Quartzose Arenite Member of the Brand Hills Formation – a highly significant stratigraphic marker horizon in Charnwood Forest.

2.10 A fourth series of rock that expose at Bradgate Park is South Charnwood Diorite, known previously as Markfieldite. This hard, igneous rock has previously been quarried in the area for aggregate, kerb stone and other building material. Within the park it forms blocky crags where it intruded into the Precambrian rocks before cooling slowly to form large crystals, which lend colour to the rock in chlorite, epidote and feldspar. Near the house site the rocks have a mottled pink colour and coarse texture.

2.11 The combined forces of nature have formed the topography of Bradgate Park. During the Silurian period, earth movements raised and folded strata to bring older rock to the surface into a modest mountain range, while subsequent weathering through the Triassic and Ice Age created the crags and slopes seen today.

2.12 The list below provides a brief summary of the key geological assets of the Park.

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**Key geological assets of Bradgate Park**

1. Hunts Hill SK524 116. Outcrops of Sandhills Lodge Member volcaniclastic rocks of the Beacon Hill Formation, the oldest rocks in the Park.
2. The Old Stable under Old John SK526 112 Precambrian fossils with good examples of sedimentary strata.
3. Outcrop north of Old John SK526 112 Precambrian fossils with volcaniclastic rocks or tuffs immediately around of which bedding planes and cleavage planes are exposed. The absence of significant cross bedding and ripple marking suggests that these strata were deposited below storm wave depth (i.e. 50m). Boulder clay is audible underneath the paths approaching Old John.
4. Memorial Crags SK 523 111 Precambrian fossils
5. ‘Little Matlock’ Gorge SK525 101. An unusual gorge, which may have been caused by the discordant drainage of the River Lin cutting through the igneous South Charnwood Diorite. Site also useful for showing intrusive relationships and the mineralogy of the diorite. The ‘Wishing Stone’ nearby is a large, independent block of diorite.

6. Triassic desert sediments in the small cliff section of the River Lin SK532 098. Useful for demonstrating the concept of a buried Permo-Triassic topography.

7. Stable Pit SK534 101. The type locality of the Stable Pit Quartzite Member of the Cambrian Brand Group exposed beneath glacial till. There is evidence of folding, faulting and a diorite dyke.

8. Coppice Plantation SK542 109. Outcrops exposing the possible base of the Cambrian Brand Group (Hallgate Member) and a sedimentary channel deposit of the Hanging Rocks Conglomerate rather than the underlying Bradgate Formation. The rock is characterised by dark and angular rocks, slumping strata and content of well-rounded volcanic pebbles. A quarry at the southern end of the plantation exposes volcaniclastic mudstone and siltstone with fine silts containing fragments of quartz and feldspar – degraded or recrystallized volcanic ash.


10. Sliding Stone Spinney SK531 114. This prominent craggy outcrop exposing Sliding Stone Slump Breccia is an important geological marker horizon around Charnwood Forest. The horizon contains distorted layers of volcaniclastic sediments perhaps triggered by earthquake activity containing lumps of finer grained mudstone. One formation is known as the ‘Swiss Roll’ which is up to 0.6m long together with rare ‘hour glass’ shapes of mudstone found on fallen blocks on the south side of this location.

11. Park Breccia SK531 115. The type locality for the Park Breccia an important marker horizon in the volcaniclastic rocks.


13. General exposure evidence for the plunging conical fold and the cleavage relationships of the Precambrian in the Park.

14. The topography of the Park and the wider views that it presents of the local and more distant landscape. This is related to its geological history and allows placement of the Park in a wider context.

LANDSCAPE CONTEXT

2.13 Charnwood Forest is Regional Park whose ‘working boundary’ was agreed in 2009 – Bradgate Park forms part of the park. Regional Parks are non-statutory partnership-led initiatives, and the aims for Charnwood Forest Regional Park are expressed in a Revised Vision Statement, June 2009 which, in summary, intends the following:

The unique natural and cultural heritage features of Charnwood Forest will be managed and promoted through the Charnwood Forest Regional Park. The Regional Park will be recognised as an essential part of the growing communities in the Derby, Leicester and Nottingham area, now and in the future.

2.14 As part of Charnwood Forest, Bradgate Park has been assessed in the Borough of Charnwood Landscape Character Assessment, 2012. This document is one of a suite of assessments that have considered the qualities of the park, including Green Infrastructure, as part of the greater local planning process.

2.15 Landscape Character Assessment guidance prepared in 2002 by The Countryside Agency (now Natural England) recognises that:

“Landscape Character Assessment is a tool which can make a significant contribution to ‘environmental protection’ and ‘prudent use’ as a cornerstone for sustainable development”
2.16 Following review in 2013, Charnwood is categorised as National Character Area 73, which reflects 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 dry stone walls and hedges. Many of the country parks are also bounded by dry stone 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 water bodies and reservoirs.

2.17 The associated Statements of Environmental Opportunity aim to conserve, manage and enhance the Charnwood character area, creating a strong sense of place:

**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.**

2.18 Examples of particular relevance to Bradgate Park include:

- Protecting and promoting understanding of the Charnwood Forest geology for the contribution it makes as a historical, scientific and educational resource.

- Protecting the distinctive rocky outcrops by ensuring that they remain un-obscured and visually accessible – as they are crucial to Charnwood’s sense of place.

- Working in partnership to implement the Local Geodiversity Action Plan.

- Encouraging the use of local building stone to reinforce local distinctiveness and to maintain historic buildings.

- Providing the necessary recreational infrastructure to meet the significant demand without detriment to the landscape.

- Maintaining and improving the distinctive drystone walls that bound the parks, as well as those found in the wider landscape.

- Protecting (through management) the open and elevated views across the upland landscape, which provides a sense of inspiration and a tranquil recreational resource.
• Protecting the historic designed parklands and their settings.
• Supporting and promoting participation in the Charnwood Forest Regional Park.

2.19 **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.**

Examples of particular relevance to Bradgate include:

• Managing heathland in favourable condition by controlling the encroaching bracken and scrub. This will ensure that the habitat of rare invertebrates (such as the Charnwood spider) and important birds are maintained.

• Seeking opportunities to re-create heathland and grassland by increasing their quality and extent, and by strengthening the interconnectivity of the networks.

• Protecting the surviving ridge-and-furrow from modern agricultural practices and development pressures.

• Promoting the management of traditional field boundaries, including drystone walls and species-rich enclosure hedgerows.

• Creating a habitat mosaic of heathland, woodland and semi-natural grassland, creating structural diversity and a variety of flowering plants. This will provide breeding sites and a food source for pollinators.

• Maintaining the fast, clear, well-oxygenated streams that support an abundance of wildlife, including rare species such as crayfish and brook lamprey. The Charnwood caddis fly is found in both Burleigh Brook and Wood Brook, but nowhere else in the country.

• Preventing the introduction of signal crayfish to unaffected waterbodies.

• Conserving and extending riparian habitats such as bogs, marshes, reedbeds and wet alder woodland along the streams and surrounding the reservoirs.

• Promoting the extensive management of agricultural land within key waterbody catchments, to improve the water quality of streams and to increase biodiversity.

• Supporting the appropriate management of semi-natural Biodiversity Action Plan (BAP) habitats for the benefits this brings to biodiversity networks, as well as to facilitate the build-up of soil carbon, thereby improving soil quality and benefiting climate regulation.

**The Local Plan**

2.20 Policies relevant to Bradgate Park have been summarised from the 2004 Local Plan for Charnwood Borough, revised 2007 (the Charnwood Core Strategy is presently under examination).

### Relevant Policies from the 2004 Local Plan, revised 2007

**POLICY EV/2 – Nationally Important Archaeological Sites**

Planning permission will not be granted for development, which would adversely affect a scheduled ancient monument or other nationally important archaeological site, or its setting. PPG16 notes that archaeological remains identified and scheduled as being of national importance should normally be earmarked for preservation. In Charnwood there are currently some 20 Scheduled Ancient Monuments including **Bradgate House and Park** …There may also be other important unscheduled remains which may also merit preservation. The Borough Council will liaise with English Heritage and Leicestershire County Heritage Service to identify those unscheduled but nationally important remains. A list of Scheduled Ancient Monuments is included in the Borough Council’s Supplementary Planning Guidance.
POLICY EV/3 - Archaeological Sites of County and Local Significance
Planning permission for development affecting known archaeological sites of county or local significance, will be granted provided the archaeological interest can be preserved in situ. Where this is not feasible or justifiable, the excavation and recording of the remains under the supervision of a professionally qualified archaeologist prior to development of that part of the site affected by the remains will be required.

POLICY EV/4 - Alterations or Extensions to Listed Buildings
Planning permission for alterations or extensions to listed buildings, where required, will only be approved where the work is in keeping with the special architectural or historic interest of the building or its character or setting.

POLICY EV/5 – The Setting of Listed Buildings
Planning permission for development which would adversely affect the setting of a listed building will be refused. In granting planning permission for development near to a listed building the Borough Council will impose such conditions as it considers necessary to protect the building’s character and setting.

POLICY EV/6 - Change of Use of Listed Buildings
Applications for the change of use of listed buildings to ensure their continued viability will be approved provided they are in keeping with the character, appearance and historic interest of the building. Applications must include full details of any proposed internal or external alterations to the building so that the effects on its character, appearance and setting can be fully assessed.

POLICY EV/7 - Demolition of Listed Buildings
Planning permission for development involving the demolition of the whole or substantially all of a listed building will only be granted where it can be demonstrated to the Council's satisfaction that the condition of the building makes it impracticable to repair, renovate or adapt to a use which would ensure its retention.

POLICY EV/8 - Buildings of Local Historic or Architectural Interest
Planning permission for development which would affect a building of local historic or architectural interest or its setting will be granted provided:

i) the appearance or character of the building and its setting are safeguarded; or

ii) the development would result in significant local community or environmental benefits.

POLICY EV/9 – Historic Parks and Gardens
Planning permission will not be granted for development which would have an adverse effect on the character or setting of the parks and gardens of historic or landscape significance as shown on the Proposals Map. To date three parks and gardens within Charnwood have been identified by English Heritage as areas with significant historic or landscape interest: Bradgate Park, Prestwold Hall; and Garendon Park... The Plan seeks to protect these areas from unsympathetic development and, where opportunities arise, to encourage the reinstatement of these areas as historic landscapes for public use. Whilst agricultural and informal recreation uses will generally be appropriate within these areas, the introduction or intensification of development for other purposes will be resisted.

POLICY EV/18 – Open Spaces of Special Character
Planning permission will not be granted for development which would result in the loss of important areas of open land retained in public or private ownership which contribute to the character of a settlement either individually or as part of a wider network of open space.

POLICY EV/21 – Sites of National Ecological or Geological Importance
Planning permission will not be granted for development which could adversely affect National Nature Reserves or Sites of Special Scientific Interest (SSSI's), proposed or designated for their ecological interest, unless an overriding national need can be shown which exceeds the level of importance for nature conservation and there is no alternative solution or other site suitable for that particular purpose.
For Sites of Special Scientific Interest proposed or designated for their geological interest, planning permission will not be granted for development which could have an adverse affect unless an overriding national need can be shown which exceeds the level of importance for nature conservation or a suitable substitute site of at least equal value can be proposed.

**POLICY CT/7 – Areas of Particularly Attractive Countryside (Charnwood Forest)**

Within the designated Areas of Particularly Attractive Countryside planning permission will be granted for uses where the proposal would not detract from the essentially undeveloped rural character of the landscape, damage natural features and landform or diminish the visual amenities afforded by important viewpoints by reason of:

i) the introduction of prominent, visually obtrusive or incongruous elements by reason of poor siting, design construction and landscaping; or

ii) the use of materials or designs incompatible with the traditional vernacular or otherwise unsuitable due to their colour or reflective qualities;

iii) the removal of traditional buildings and structures, or particular elements of them, or other landscape features which contribute to the special character and appearance of the locality.

Where development is acceptable in principle it will be expected to maintain or enhance the character and appearance of the landscape.

Proposals by statutory agencies involving the construction of large buildings or structures, including overhead power lines, will be acceptable where they are shown to be essential to operational requirements, and are located to minimise the visual impact on the landscape.

**OWNERSHIP & MANAGEMENT**

**Ownership**

2.21 Bradgate Park is owned by and administered by the Bradgate Park Trust (formally known as The Bradgate Park and Swithland Wood Charity). The Trust was formed and regulated under a Trust Deed, dated 29th December 1928 and it operates a Committee of Management (consisting of nine Trustees appointed by Leicester County Council, Leicester City Council and the National Trust), the estate office being located at the Deer Barn Buildings in the centre of the park. Leicester County Council and Leicester City Council are the Holding Trustees of the park, and the Trust obtained a new Scheme of Management by the Charity Commission, following an application to update the original Trust Deed, on 4th September 1980. The Leicestershire Yeomanry War Memorial forms a separate charity established in 1981 but is managed, together with a small piece of associated land, by the Bradgate Park Trust. The objects of the charity include:

- The provision of a public park and recreation ground, and the maintenance and improvement thereof, for the benefit of the inhabitants of the County of Leicestershire, and of visitors thereto, with the object of improving the conditions of life for such persons, and

- To advance the education of the public in the care and appreciation of the environment.

2.22 The country park came with no endowment and no restrictions were placed on the Trust, which preclude the making of charges, presently restricted to car parking. The Trust is expected to apply for appropriate grant aid to help it maintain the park, together with the securing of other gift aid and sympathetic income generation. The Trust is able to acquire additional land, especially where such purchase will help secure the boundaries of the park or provide a future safeguard.

2.23 Swithland Wood, which forms part of the country park (but which is outside the scope of this plan), was gifted by the Leicester Rotary Club in 1931. It is incumbent upon the Trust to manage the elements of the landscape – the geology, tree cover, built features, ecology and deer herds – appropriately and in accordance with any statutory requirements. In addition, land on the fringes of the park is farmed where economic viability is required to compliment and enhance the myriad significances of the park.

2.24 Bradgate Park and Swithland Wood were granted designated status as a Country Park in 1970 under the provisions of The Countryside Act, 1968.
Management

2.25 In 1996 a Management Plan was produced and endorsed by the Trustees, which informed a management strategy on which basis the country park has been since managed.

2.26 Day to day management of the park is the responsibility of a small team of Rangers, who are supplemented by part-time or seasonal posts, with outside specialist contractors employed as appropriate. The Rangers lead guided tours and other interpretative information is available from the visitor centre.

2.27 C.500,000 visitors per annum make Bradgate Park the most popular recreational facility in Leicestershire. The park is open to visitors from early morning until dusk on every day of the year. Visitor facilities and refreshments are available on site at the Deer Barn buildings, Country Park shop and near the main car park.

2.28 Dogs under control are welcome and all dogs are to be kept on leads when in the vicinity of deer and ground nesting birds. Dog owners are now required to clean up after their pets in the more intensively used areas of the site. Horse riding is welcome along marked bridleways and concessionary horse tracks through the park.

2.29 Cycling is only permitted along the main route through the park but may be restricted during peak times in the interests of health and safety. Off-track cycling is not permitted on account of potential conflict with walkers, animals and increased erosion. Orienteering, kite flying and the flying of model gliders are also permitted in identified areas but other activities including hang gliding, metal detecting, formalised rock climbing, camping and paintballing are not.

2.30 Visitor infrastructure improvements continue at Bradgate Park and include the opening of the Conservatory Tea Room at the Bradgate Country Park Shop in 2012 (outside the park boundary). Plans are emerging for a new visitor centre (within the footprint of the existing building) and upgrade of existing facilities at Newtown Linford include an extension to the toilets and increased overflow car parking; the existing overflow area having been reinforced by mesh.

A history of deer at Bradgate Park

2.31 Deer have been kept at Bradgate for 760 years, surviving Medieval and Civil War and subsequent reduction in the late nineteenth and early twentieth centuries when their purpose as a living larder and sporting trophy changed to one of amenity, of ornamenting a landscape park.

2.32 The park is understood to have held fallow (Dama dama) and red deer (Cervus elaphus) from an early period; the estate map of 1746 (Figure 3.5) provides the first clear evidence for the two species although, somewhat peculiarly, no deer are depicted on the map. To the south and west of the house three ‘launds’ are recorded: ‘Spinny’, ‘Stable’ and ‘Newton’, all within a fenced and walled enclosure, with a walled yard and lodge to the north of the river together with a square shaped spinny or covert. The southwestern boundary of the launds reflects the line of the medieval pale. Launds were areas of open ground, typically associated with fallow deer, where animals were brought to be admired or to help calve – their grazing keeping sward low and hence the derivation of laund to lawn. A separate ‘Red Deer Park’ is recorded to the northeast of the house, with its own associated lawn – ‘Neathen Laund’ to the southeast, planted up with a pair of square coverts. This lawn is bisected by the double avenue suggesting that the majestic red deer would have formed part of the view and the experience of the gardens and near park.

2.33 Between the two areas and connected to them by gates set within a perimeter wall is High Park, a substantial post-medieval area of park to the north and northwest of the house. High Park contained two buildings, possibly keeper’s or parker’s houses, one near the centre of the area, enclosed by rail, the other standing within an area of loose plantation near the southern boundary. Theoretically both species could have mixed in High Park, but its exposed topography would have better suited the more hardy reds and ‘High Parks’ are also more traditionally associated with red deer. The area of the present Deer Sanctuary is recorded as fields at this time. In the 1888 Ordnance Survey the clearest indicator of the deer is the Deer Barn, the present visitor centre.
Deer Population

2.34 By the mid-nineteenth century the park contained a herd of c. 500 animals, the majority of which were fallow. In 1892, 130 fallow and 50 red were recorded, the fallow having been depleted by a series of hard winters. Numbers steadily increased through the late-twentieth century to 140 red and 170 fallow recorded in 1988. It is particularly significant that the herd survived the two world wars, which witnessed the conscious destruction of many park herds across the country, including that at Garendon Park, the only other surviving Charnwood herd.

2.35 Most recently (2010) 121 red and 254 fallow were recorded before the cull. The stocking density at Bradgate is quite low, with c. 1 animal per hectare. The park aims to maintain a mixed herd of between 320 – 390 animals (following the cull) with a ratio of 40% to 45% of red and 60% to 55% fallow. The cull takes place from September to the end of April, with the intention of reducing breeding females by about 50%. The aim is to create a herd equitable to seasonal grass and fodder growth and to produce carcasses above average weight.

2.36 The herd at Bradgate Park is a traditional parkland herd managed with minimal intervention. The deer are not handled unless for health reasons or as carcasses following culling, for which there is a small slaughter-house and larder on site. They are not vaccinated, tagged or individually identified. The bloodline is occasionally refreshed, animals being introduced from Warnham in 1939, and animals transported from Bradgate to elsewhere. A recent report noted that the fallow deer are generally smaller than elsewhere and suggests that this may result from eighteenth century selection, when smaller animals were preferred as this made the antlers appear more impressive. The animals are considered to be in good health and not underfed as few trees within the park show signs of grazing.

Deer Management

2.37 A Management Plan of 2011 informs the management of deer in Bradgate Park; it is influenced by two separate reports commissioned in 2010 (A report upon deer management and the impact of the deer upon the habitat, Peter Green, 2010 and A Review of the Management of the Deer and the Vegetation, Professor Rory Putman, 2010). The park is now reviewing management in light of these reports, the effect of bracken control on available forage areas and the changed economics of the deer herd.

2.38 The deer herd grazes the park and helps control the invasive bracken, the bracken also functioning as welcome shade and cover especially for calves. Coppice Wood is the only area of the park completely closed to deer. During the winter months, supplementary feeding is permitted (even within the SSSI) after the rut in November and until the arrival of sufficient Spring grass. This feed is a mix of concentrates, hay supplemented by Rumevite feed blocks with copper additive (the herd has traditionally been copper deficient).

2.39 Supplementary feeding takes place throughout the park in an effort to combat erosion and poaching around feeding stations and to help prevent the build up of liver fluke, and associated health issues, in Deer Meadow. Fortunately the examination of culled animals suggests that fluke is not a major problem at Bradgate but it is a management concern.

2.40 Bracken forms part of the diet of the deer of Bradgate Park. However, the herd can only contribute to the management of the invasive bracken, which also requires mechanical control (and now selective chemical systemic control as of 2014). Other pernicious weeds are treated by hand pulling or spot treatment; grass is rolled and chain harrowed.

2.41 The size of the herd indicates that it is unlikely that the animals are unduly compromising the condition of the SSSI, although grazing pressure is affecting plants such as Creeping Willow. The deer densities are generally higher in Low Park and south of the road, with tracks established through bracken cover higher up. From assessment, it appears that the wet heath is more susceptible to harm from free drainage issues and the sensitive grassland areas within the main feeding areas are also those subject to increased visitor footfall.

2.42 The deer herd introduces two potential major hazards to visitors – Lyme Disease and Liver Fluke. Lyme Disease is a tick borne disease transferring the bacteria Borrelia to humans. Symptoms include fever, headache and fatigue with a rash often forming between 3 – 30 days after infection. Untreated, Lyme Disease can lead to damage to the heart and central nervous system. Controlling bracken may help
reduce micro-climate humidity and as tick populations do not like dry conditions bracken control will result in fewer ticks.

2.43 Liver fluke is passed to humans by eating contaminated food, usually fluke-infested fresh water raw or undercooked fish. However, Bradgate Park poses a small risk through the mix of deer and visitors with deer faeces infected by the parasite being present in areas where visitors picnic or play.

2.44 Potentially a greater risk to visitors at Bradgate Park are adders *Vipera berus*, the only venomous snake in Britain, which are found throughout the park particularly on the higher ground.

**The visitor attraction**

2.45 Bradgate Park has formed part of the visitor attractions of Charnwood Forest since at least the late nineteenth century, when the Earls of Stamford allowed the workers of Leicester to enjoy the park on public holidays. Prior to that it is understood that visitors, specifically local naturalists and geologists, were able to visit the park by invitation. Published research on the rocks of Bradgate dates to at least 1790.

2.46 The formal role of Bradgate Park as an essential green space for Leicester and the East Midlands began with the sale of the park in 1924 to Charles Bennion and his gift to the city and county of Leicester in 1928. The relatively poor transport infrastructure throughout Charnwood Forest has always placed an emphasis on private transport and car parking is known to have been an issue at the site since the later 1950s.

2.47 Bradgate Park today welcomes c.500,000 people per annum and the high use of the park by foot traffic, bicyclists and horse riders has formed a distinct network of paths across the landscape. The on-going wear and erosion contributed by this heavy use, and compounded by grazing animals, does mean that the landscape is under pressure. In addition, serious concerns have been raised about the security of the geological and fossil resource and access to parts of the park are now carefully managed. The ruins of Bradgate House have been stabilised but again, the constant access is affecting the stability and conservation of the surviving stonework and, ultimately, the significance of the Scheduled Monument.

**DESIGNATIONS**

*Heritage*

2.48 There are two Grade II* and 3 Grade II listed buildings within the study area. Bradgate Park is included in the English Heritage *Register of Parks and Gardens of Special Historic Interest* at Grade II. There are two Scheduled Monuments within the park, comprising the remains of Bradgate House and a moated lodge site 200m west of Bradgate House.

2.49 The statutory designations are mapped in **Figure 2.2** and the listed buildings within the park are summarised in the table below.

<table>
<thead>
<tr>
<th>List entry no.</th>
<th>Name</th>
<th>Grade</th>
<th>Fig 3.4 map ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1074678</td>
<td>OLD JOHN TOWER</td>
<td>II</td>
<td>1</td>
</tr>
<tr>
<td>1177287</td>
<td>LEICESTERSHIRE YEOMANRY WAR MEMORIAL</td>
<td>II</td>
<td>2</td>
</tr>
<tr>
<td>1074677</td>
<td>CHAPEL AND RUINS OF MANSION</td>
<td>II*</td>
<td>3</td>
</tr>
<tr>
<td>1177276</td>
<td>TILTYARD</td>
<td>II</td>
<td>4</td>
</tr>
<tr>
<td>1361080</td>
<td>GARDEN WALL</td>
<td>II*</td>
<td>5</td>
</tr>
</tbody>
</table>
Wildlife

2.50 Bradgate Park falls within the Charnwood Forest Living Landscape Project. The upland character of the Bradgate Park currently consists of extensive bracken cover interspersed with patches of species poor semi-natural grassland, remnant wet and dry heath, plantations of conifers and mixed broadleaved trees and groves of veteran trees. This landscape, together with its underlying geology, is nationally important and is legally protected by the Bradgate Park and Cropston Reservoir SSSI (citation included in Appendix). The Park is included within SSSI Units 19 (288 ha of ancient parkland) and 20 (34 ha of wet grassland/remnant wet heath). It does not include SSSI Units 21-23 which correspond to Cropston Reservoir, the Ancient Woodland within Hallgate Wood, Dimminsdale pastures and plantation and Puddledyke. The Parkland component of the SSSI is described by NE as “one of the finest remaining examples of ancient parkland in Leicestershire…[and] contains some of the last remaining fragments of wet heathland in the County”.

2.51 Chapter 4 provides detailed information on the park’s ecology.
Rights of Way and access

2.52 Bradgate Park is served by formal and informal rights of way. One long distance footpath crosses the park to reach the house site, whilst other adopted footpaths link southeast towards Dimmingsdale. Elsewhere informal paths and tracks criss-cross the landscape of the park focussing on features such as Old John viewpoint, the Sliding Stones and the spinneys.

2.53 In accordance with their management plan, the Bradgate Park Trust aims to:

• Maintain the definitive Rights of Way (footpaths and bridleways) over the Estate. The public have appropriate rights of passage, at all times, along such rights of way, notwithstanding that the Country Park is closed to visitors between dusk and early morning.

• Encourage the Highways Authority to sign Rights of Way leading to and from the Estate.

• Encourage visitors to use the Country Park as a base from which to explore the wider countryside – by using the network of public footpaths and bridleways.

• Provide and maintain a network of concessionary horse-riding tracks on the Estate to supplement the definitive bridleways. (Such concessionary tracks may be closed should ground conditions or management requirements necessitate).
3. **Historic Development of the Estate**

**Early History**

3.1 The earliest evidence of human occupation within the area of Bradgate Park comes from the Late Upper Palaeolithic, the park containing an internationally significant in-situ open occupation site. Despite the great increase in the number of known Neolithic, Bronze Age and Iron Age sites from other parts of Leicestershire in recent decades, including the eastern fringes of Charnwood Forest where two nationally significant Neolithic settlements have been identified at Rothley, it had previously been recorded that little evidence has been found of later prehistoric occupation within or near to Bradgate Park. However, the prehistoric potential of the surrounding area is not well understood due to a lack of systematic fieldwork although there will have been some evidence of new prehistoric sites coming to light in various places. In essence the picture is one of increasing evidence and settlement where it was previously unrecognized. The Neolithic houses at Rothley are symptomatic of this sea-change in the evidence for, and perception of, the extent of earlier occupation. Previous assumptions on the lack of suitability of land for occupation/the survival of dense uninhabitable woodland have mostly been shown to be inaccurate.

3.2 Thus whilst a lack of early history had been remarked upon by previous historians including Leland (mid-16th century), Burton (1662) and Throsby (late 1700) and more recent appraisals including Squires and Humphreys (1986), recent work including the surveys undertaken for this report reveal extensive bank and ditch systems with several enclosures surviving as earthwork features. Although mostly undated these features may relate to later prehistoric occupation.

3.3 During the Roman occupation, Bradgate fell into the Civic Zone to the north of Leicester and is understood to have been populated by small, dispersed settlements set out along the river corridors. Finds of Roman pottery, a coin and Roman tile have been made within the park and may indicate the presence of a Roman occupation site nearby. By the Saxon period, Charnwood had been split into four manors – Groby (including Bradgate), Whitwick, Shepshed and Barrow.

3.4 Prior to its enclosure as a deer park, the area would have formed part of a rough stretch of wooded country crisscrossed by ancient tracks, probably the most important being that winding up the hill of Old John and leading to Shepshed, possibly the ‘Heyway’ mentioned in a document of 1240.

3.5 The ‘woodmanship’ of Charnwood Forest was notable, with the continuous cropping of trees – for timber and fodder – creating many of the distinctive pollards, which survive in Bradgate Park today. A sixteenth century account identified three specific forms of woodland within Charnwood – *timber*, large forest trees; *lopped*, pollarded trees and *scrub*, being generally used to describe stunted growth or scrub. Woodland historian, Professor Oliver Rackham, has calculated that woodland cover in this part of Leicestershire equated to 3.3% of the land cover at Domesday, similar to that recorded in 1895: Leicestershire is historically one of the least wooded counties in England on account of early clearance and sheep grazing and later charcoal for the industrial revolution. The lack of timber at Bradgate may account for so little record – certainly other local parks, including Grace Dieu, record regular timber sales or thefts from c. 1200 on.

3.6 Domesday also records the low population of the area. The core of Charnwood Forest accounted for ‘four carucates (480 acres) of ‘waste’ with less than three people per square mile.

3.7 Charnwood Forest was never a Royal Forest or a Chase (a hunting area belonging to the nobility and not the Crown), so the traditional Forest Laws did not apply.

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Bradgate Park was formed out of the waste of Charnwood Forest as part of the Manor of Groby, which had been granted to Hugh de Grentmesnil by William the Conqueror in 1066. The park was specifically enclosed for the purpose of hunting deer, whilst also displaying the wealth of its owner, and was subject to special protection from the newly introduced Norman law. There were many such parks throughout England during the Middle Ages, including around 50 in Leicestershire, and they were carefully planned to make use of the existing terrain. They were often sub-rectangular or oval in shape to minimise the expense of fencing, prevent deer from being hemmed into a corner too early in the hunt, or due to being laid out in an area of open wasteland as opposed to a more densely settled area. This was likely the case at Bradgate, where the original enclosure may have comprised a smaller, more rounded layout within the middle of the current park, although recent survey suggests what may have been a more complicated picture for the early development of the park (Figure 3.1 below).

The park would have been enclosed by a deer proof boundary, comprising an internal ditch about six feet deep and an outer bank of around six feet in height with a wooden fence or along its top, the whole being known as a pale. This feature enabled deer to jump into the park, sometimes over a purpose built deer leap, but prevented them from escaping, and the remains of the early Bradgate pale survives within the park today as an extensive earthwork; recent LiDAR evidence has suggested a possible additional phase to the pale and an alternate northern alignment. This early park was managed by a ‘parker’, who may have lived in a moated house in the middle of the park and was tasked with tending the deer herd, ensuring they neither escaped nor were poached. The site of this moated house for the parker or another more notable resident also survives as an earthwork within the park, its ditch still filling with water during wetter periods.

Figure 3.1: Medieval layout of Bradgate Park

3.10 There was also a village of Bradgate during this time, first mentioned by name in 1377 when it comprised a small scattered group of dwellings, possibly to the north east of the deer park and today the location of the Cropston Reservoir. Recent archaeological survey may, however, reveal early medieval evidence surrounding the Tudor house site, suggesting possible occupation of this area. If the former, the village may have been swept away by Thomas Grey’s expansion of the park in c1500 and its residents relocated first to the south of the park, then finally between 1562-1600 to a further location at Field Head. Evidence of ridge and furrow has also been revealed beneath the reservoir and elsewhere within the outer confines of the current park, indicating the medieval ploughing of the land outside of the medieval park by the villagers, which reflects an arrangement recorded on surveys and plans dating from the mid eighteenth century.

3.11 The first mention of Bradgate Park dates from 1241, when the owner of the manor of Groby, The Earl of Arundel, gave fellow nobleman, the Earl of Winchester, the right to take deer with nine bows and six hounds (although the park may have been created anytime before then back to 1066). The park was described as having ‘walls, ditches, hedges and palings’. Winchester permitted fellow noble, Roger de Somery, to enter the park in pursuit of wild deer but not take deer from within the park, and to limit his kill to a brace of buck in season and a brace of doe in season. In return, the Earl promised not to enlarge the park ‘besides the ancient enclosures of the aforesaid forest’.

3.12 Between 1279 – 1445 Groby Manor, and thus Bradgate Park within it, was owned by the Ferrers family, before passing into the hands of the Greys by marriage, with whom it would remain for nearly 500 years. An account of 1350 recorded ‘herbage, pannage and underwood’ in the park to the value of 40 shillings a year while by 1391 the park was defined by ‘walls, ditches, hays and palings’ with rangers employed to protect the deer.

3.13 Edward Grey married heiress Elizabeth Ferrers in 1427, becoming Lord Ferrers and baron Grey of Groby after the death of Elizabeth’s grandfather in 1445. Their son Sir John Grey greatly improved the family’s fortunes when he married Elizabeth Woodville of Grafton, the daughter of a minor European princess. They had two sons, Thomas and Richard, but Sir John was later killed during the Wars of the Roses, and the Grey estates were confiscated. Remarkably though, the widowed Elizabeth waylaid King Edward IV as he hunted nearby, and a secret romance culminated in a wedding, thus making Elizabeth Queen of England.

3.14 This was not to be the end of Elizabeth’s troubles, however, as following the death of the King, her two sons by him were to become known to posterity as the Princes in the Tower, believed to have been murdered as the behest of their Uncle Richard who seized the throne to become Richard III. Following the Battle of Bosworth Field in 1485, Henry VII took to the throne and united the houses of York and Lancaster by marrying Elizabeth’s daughter, Elizabeth of York. Thus Thomas and Richard, Elizabeth’s sons by her first marriage, were brought up as stepsons of the King of England. The associated problems of succession accompanied them, and Richard was executed, although Thomas was more fortunate, surviving the wars and being created Marquess of Dorset. Thomas lavished great attention upon his country estates when time permitted, and began to modernise the manor house at Groby between c1488-1492. It appears that Thomas promptly abandoned work on this house at a late stage, however, and instead turned his attentions to a much more ambitious project: the expansion of the deer park and the building of a great new mansion there.
The Tudor House, Garden & Park: c1500 – 1739

Establishing the new house and park (1st and 2nd Marquesses of Dorset: c1500-1530)

3.15 Thomas Grey’s ambitions would have been stoked by his involvement at the royal court after 1485, where men jockeyed for prominence and royal favour and began to express themselves by constructing large houses in new parks, moving away from the functionality of the fortified manors and castles of the Middle Ages. Thomas continued to have a troubled relationship with the King as a result of his uncertain loyalties, however, and he even spent time in prison, thus he had probably only made little headway on his new house by the time of his death in 1501.

3.16 His son, Thomas 2nd Marquess, also had a troubled relationship with Henry VII, spending time in the Tower and in exile in Calais, although his prospects brightened when Henry VIII took to the throne and he became a close leisure time companion. Royal favour soon waned, however, and Thomas retreated to his country estates, especially Bradgate where he continued the construction of the mansion begun by his father, following the sale of the family’s Essex estates. By the time of his death in 1530, it is likely that the greater part of the construction of the house and the expansion of the park was complete; Leland describing the park as ‘fair’ in 1530.

3.17 Sources of information for the construction of Bradgate House are slight, although records suggest three periods of activity: the first between 1499-1507, when the 1st Marquess had begun preparation of the site and his son probably laid the foundations and began expanding the park, the second between 1509-11, following Thomas’s exile and prior to his involvement at court, and the third between 1523-30, after the lessening of Thomas’s royal duties up until his death. With its expensive use of brick instead of the traditional stone, its lack of defences and its focus on grandeur as well as comfort, Bradgate House was at the apex of the new wave of the early Tudor manor, being the first unfortified stately home built in Leicestershire.

3.18 The household comprised perhaps around some 200 people, whilst the rooms at Bradgate were double-banked in contrast to the more usual single range, suggesting alterations to the original plan as building progressed. The Marquess spent much time in exile in France, and it is likely that he was ready to adopt the Renaissance influences that were infiltrating the court, with an emphasis upon symmetry which would have been further enhanced through the addition of the corner towers. Contemporary examples include the Vyne, Hampshire and Compton Wynyates, Warwickshire, which were both constructed around the same time. For all its innovation, however, the house at Bradgate did not depart from tradition as comprehensively as the later Elizabethan houses such as Hardwick Hall or Montacute, retaining the ancient ground plan of a cross hall flanked by two wings.

3.19 The expansion of the park during this time, which directly reflected the rising status of the family, would also have been a lengthy and costly endeavour, entailing the removal of the medieval pale and replacing it with a new one twice as long. At around six miles in length, the new park boundaries were laid out in straight lines across the landscape, an expensive solution demonstrating the focus upon displaying wealth over practical concerns. The hand of the surveyor, as described by Squires and Humphrey’s (1986) needed also to carefully negotiate aspects of the land beyond the original park and outside of the Marquesses’ control, namely the route of the King’s Highway from Newton Linford north and a careful
balance of enclosing recognised unprofitable farmland within the park (ridge and furrow\textsuperscript{6}) whilst allowing the tenants to continue to farm more productively to the west and east and in recognition of the different neighbouring manor of Cropston. The parker’s moated house was removed and the deer’s guardians relocated outside of the park, whilst the road from Newtown to Anstey was re-routed and the medieval village of Bradgate swept away, a common occurrence during 16\textsuperscript{th} and 17\textsuperscript{th} century parkland expansion. It is recorded that the villagers left ‘in grief’, and Grey was summoned to answer in Chancery for the crime of depopulation but pleaded that they had been rehoused elsewhere even though some of the earlier fields to the east of the house and park remained. The newly expanded park at its fullest extent covered around 1000 acres.

3.20 Drinking water was fed by gravity along a pipe to the house from a spring on the high ground to the north. A more substantial system was constructed to flush out the drains and power the watermill, comprising a sizeable lake to the west of the early park pale stretching up towards the present Newtown Linford car park, fed via a leat to the pond above the house, which provided another head of water to power the mill and also serve the fishpond (both leat and pond are clearly visible within the park today).

\textit{Lady Jane Grey (1537-1554)}

3.21 Henry Grey, the 3\textsuperscript{rd} Marquess of Dorset, inherited Bradgate in 1530, and married Frances Brandon, niece of Henry VIII. Of their three daughters, one was to be remembered throughout history for her tragic tale – Lady Jane Grey. Jane largely grew up at Bradgate, and a famous meeting was recorded there between her and the scholar Roger Ascham: finding her alone in the house reading \textit{Phaedo Platonis} in Greek while the rest of the household was out hunting, Jane told Ascham that all their sport was but a shadow compared with the pleasure she found in Plato. Clearly Jane was cut from a different cloth from the generations of Grey males before and after her, given Bradgate’s focus upon the pursuit of sport throughout the centuries. Jane was forced into marriage in 1553, part of the ill-fated scheme by her family to seize the crown upon Edward VI’s death, events of which ultimately led to her execution in 1554. According to legend the woodsmen at Bradgate lopped off the tops of the oak trees to mark the tragedy – there are several trees surviving within the park that may date back to this time, although their ‘lopped heads’ probably more likely reflect the standard practice of pollarding trees to provide timber and maintain their vigour. Jane’s family were also soon to meet unfortunate ends, and it was not until James I replaced Elizabeth I on the throne in 1603 after her long reign that the fortunes of the Grey family were revived.

3.22 The first known representation of Bradgate Park dates from this era, being recorded on a ‘Saxton’ map of 1576 (Figure 3.2 below). This shows the large oval pale of Bradgate in the south of Charnwood Forest, bisected by the River Lyn. Bradgate is one of the largest deer parks with only Bardon to the west and Loughborough to the north competing in size.

\textsuperscript{6} The ridge and furrow in Bradgate Park is described as ‘poor’ even by Charnwood standards owing to the shallow, acidie soil. Squire and Humphreys \textit{The Medieval Deer Parks of Charnwood Forest}, 1986. P. 92
Fluctuating family fortunes (1st to 3rd Earls of Stamford: 1628-1739)

3.23 Henry Grey, son of lady Jane's uncle, was created baron Grey of Groby and moved back to Bradgate in the early 17th century. Henry's son predeceased him, and thus it was his grandson, another Henry, who inherited in 1614. This Henry further improved the family's fortune by marrying into the Cecil family of Burghley House, and he was made Earl of Stamford in 1628, the first of ten Grey Earls of Stamford. Despite entertaining Charles I at Bradgate in 1634, the Greys took up the Parliamentary cause during the Civil War. The Earl of Stamford took command of Parliamentary troops in the West Country, whilst Bradgate itself was ransacked by their Royalist neighbours and enduring foes, the Hastings, although little real damage was done. It was Stamford's eldest son, Thomas Lord Grey of Groby, who was the real fanatic of the family, however, commanding all of the Parliamentary forces in Leicestershire and, at the end of the war, sitting in on the trial of Charles I – his signature is the second on Charles's death warrant, between the names of John Bradshawe and Cromwell himself. After the war though Cromwell distrusted Lord Grey, who died in 1657 before his father and thus never inherited. The Earl of Stamford lived on until 1673, having since switched allegiance to the monarchy and supported the Restoration, although never being entirely trusted by the Stuarts.

3.24 The Earl's grandson, another Henry, inherited upon his death, becoming the 2nd Earl of Stamford and the last to use Bradgate House as his principal residence. The 2nd Earl was arrested at Bradgate and sent to the Tower for his involvement in a plot to supplant the unpopular catholic King James II, although was soon pardoned. The Glorious Bloodless Revolution of 1688, which brought William and Mary to the throne, improved the Earl's fortunes, and a high point at Bradgate came in the summer of 1696 with the visit of King William III. No expense was spared for this event: stables for a hundred horses were erected in the park within nineteen days, one of the bridges over the brook at Anstey was widened (and known ever since as King William's bridge), and a great new bay window was inserted into the great hall at Bradgate House. The King was suitably pleased with his visit, but as often happened with the hopeful elite, the Stamfords never recovered financially from their extravagance. The house, gardens and
surrounding park are captured around this time in a detailed and informative illustration by Leonard Knyff (Figure 3.3), the deer park an increasingly rare site in Charnwood where all of the deer parks had been disparked with the exception of Bradgate and Garendon, to the north, by the mid seventeenth century.

Figure 3.3: Leonard Knyff illustration of Bradgate House & garden from the north, c1700

3.25 Interestingly, Squires and Humphrey’s (1986) suggest that Knyff depicted a more elaborate arrangement within the gardens than probably existed, citing the topographers recent work at the unapologetically high status Staunton Harold Hall as influence. However, there is no evidence for this and given Knyff’s reputation for accuracy it is a peculiar claim to make, especially as the later maps of 1746 (Kiddiar) and of 1774 also reflect this layout. The one building which is not fully explained, however, is what is understood to have been a substantial gate house which stands immediately to the south of the house at the head of the un metalled but formal avenue approach from Anstey. This building survived until at least 1746 but all that remains on the ground today is the granite bridge, crossing the Lyn, and a short section of cobbled roadway (now increasingly lost beneath grass) on the north side of the river leading towards the house site.

3.26 The 2nd Earl died in debt and childless in 1720, whereupon Bradgate passed to his cousin Henry of Enville Hall, Staffordshire, who became the 3rd Earl of Stamford. The 3rd Earl appears to have had no interest in living at Bradgate or selling it, and it was left to his son and heir, Harry, to move there in 1736 following his fortuitous marriage to Mary Booth, heiress of Dunham Massey in Cheshire. The house was opened up and refurbished, although this brief occupation lasted only three years, since the 3rd Earl died in 1739 and the recently married couple moved to Enville Hall. Bradgate House was finally abandoned, with slow decline of the house and gardens setting in and recorded as a ruin by 1800 (bricks from the house can today be seen in the cottages of the surrounding villages). Enville Hall and Dunham Massey became the two principal seats of the subsequent Earls of Stamford, with Bradgate kept on managed by successive agents as a park for the pursuit of sport and associated timber production (the spinneys). Unlike at Enville and Dunham Massey, Bradgate Park was not subject to further development in contemporary later fashions, just missing out on Lancelot ‘Capability’ Brown’s landscape style by a few years (Brown started work deforming the park at Burghley in 1756), which conserved its almost medieval character and ‘timeless nature’. The fact that the soils within the park were historically poor and not suited to agricultural improvement – often a driver for a Landscape Park – must also be acknowledged at Bradgate.

7 Squires and Humphreys, The Medieval Deer Parks of Charnwood Forest, 1986, p. 88
Figure 3.4: Full extent of the park by the 17th century
The Park uninhabited (1740-1928)

3.27 The Grey family fortunes continued to fluctuate through the years, although Bradgate Park would remain within their ownership until the early 20th century. An estate map produced in 1746 (Figure 3.5) provides an indication of the layout seven years after the house had been abandoned, with the park clearly still remaining an important asset. The map shows a similar arrangement within the gardens to that shown on the Knyff illustration, although with a long double or triple row avenue stretching east from the garden out to the Cunney (the rabbit warren in the location of the current reservoir).

3.28 Soon after the Greys left the house in 1739, the park pales, which were expensive to maintain, were replaced with the more functional stone walls in 1740-1 that survive today, the date in-part established by lichen surveys which took place in c. 1986. Squires and Humphrey’s (1986) summarise the development of the stone boundary identifying the north and northwest section as seventeenth/early eighteenth century; south and central boundary as late eighteenth/early nineteenth; the eastern boundary c. 1866–70 and the spinney walls completed by c. 1850. Part of the original pale survives purely as an earthwork running through the centre of Coppice Plantation.

3.29 The 1746 plan is also important as it records the relic village fields within the eastern part of the east – Great Balladown and Little Balladown reflecting in their names an earlier boundary (land by the boundary mount) and Cottager’s Close possibly helping to locate the lost village, which had disappeared from the formal record with the Hearth Tax of 1664 recording no dwellings.

![Figure 3.5: Bradgate Park Estate Map by Nicholas Kiddiar, 1746](image)

3.30 A ‘Plan of Bradgate’ dated 1774 - referred to by Squires and Humphreys but not available for reproduction - offers the next overview of the landscape recording the retention of the majority of the

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8 Squires and Humphreys *The Medieval Deer Parks of Charnwood Forest*, 1986 p. 94
layout shown by Kiddiar but also recording the beginning of the establishment of the spinneys. A windmill is shown near the site of the later Old John Tower with the stables, pheasantry and gatehouse clearly shown to the south of the house.

3.31 Old John Tower was built on the highest point of the park in 1784 by Thomas Sketchley of Anstey, in the location marked with a windmill on the 1746 map and recorded as ‘John Hill’. The original tower appears to have been an open folly, similar to that at Mow Cop in Staffordshire, with early photographs showing a second aperture and more walling beyond, removed in the mid-19th century. The coming of age of the future 6th Earl of Stamford in 1786 was celebrated on the same spot with a bonfire. The 4th to 6th Earls appear to have divided their time between Enville, Dunham and London, using their Leicestershire estates primarily as a source of income. In 1842, Queen Adelaide, William IV’s widow, celebrated her 50th birthday with a picnic in Bradgate Park under an oak beside the road, now known as Queen Adelaide’s Oak.

3.32 John Prior’s map of 1779 (Figure 3.6 below) records the solid boundary of the walled park at its greatest extent of 737 acres. The map is similarly conceptual to the early Saxton map and records little detail but it does record scattered tree planting on high ground to the south of River Lyn, a line of trees along the north bank of the brook and a small group of trees near Tyburn in the west park. It is remarkable how different this park appears to the highly designed landscape established by the Phillips family at Garendon Park to the north, with its series of avenues clearly depicted on the drawing.

3.33 The first map to attempt to record the dramatic topography of the park is King’s Map of 1806 (Figure 3.7), which despite the poor quality of reproduction clearly depicts the high ridge running through the centre of the area with a distinct woodland at the west end of the brook and a small woodland straddling the south boundary. This map also records a sense of spaciousness around the park on the west and north, land that remained unenclosed until 1808 when the General Enclosure order created the framework of the Charnwood landscape known today.

3.34 By the early nineteenth century, the romantic nature of Bradgate’s landscape had already established it as a tourist destination. In his survey, Nichols celebrated the “un naturally romantic” venerable trees and
rugged rocks, while in 1831 Curtis observed “A general appearance of wilderness and desolation which a few scattered oaks in the last stages of decay tend to greatly augment”.

Between 1831-41, the 6th Earl established the oak, elm and ash spinneys in High Park, planted for the benefit of pheasant shooting and enclosed with stone walling to prevent deer encroachment whilst also providing a future timber resource in the aftermath of the Napoleonic Wars. The spinneys were worked in rotation. The deer herds were complemented by a small herd of polled Galloway cattle.

**Figure 3.7: W. King’s Map of 1806**

**Sketches of Bradgate Park c.1836 (by kind permission of Mr & Mrs Peter Williams, Enville Hall)**

*Bradgate House ruin from the south west*
The 7th Earl of Stamford, George-Harry, inherited in 1845, aged 18 and with a great fortune. After marrying twice for love to women with a colourful background, he pursued his interest in sports and became Master of the Quorn hunt in 1855, building kennels at Bradgate. To provide himself somewhere to live during the hunting season, he built a new mansion at Stewards Hay, near Field Head, confusingly called Bradgate House (later sold to a quarry company in 1925 and demolished). His time with the Quorn hunt was plagued by the demeaning attitude of its members towards his second wife, Catherine, who was formerly part of a circus act, and he eventually gave it up in 1863.

The 7th Earl turned his attention to racing horses, building up an extensive racing establishment at Newmarket and spending a fortune on bloodstock. He also laid out a practice racecourse at Bradgate around Old John (as he did also at Enville), and some of the marking stones still survive. His horses scarcely won a race, however, and before long he auctioned them off, before turning his attentions to shooting. There was already a good stock of pheasants at Bradgate, which had been enhanced through the creation of the spinneys by the 6th Earl in the 1830s, and great house parties descended upon the new Bradgate House to daytrip over to Bradgate Park and shoot game in great numbers. In 1861 a record bag of 3,333 rabbits were shot in one day with more superior game driven for the Prince of Wales (later Edward VII) at Bradgate in 1882, when between 2,000-3,000 head of game were also reputedly shot.

The enthusiasm for game and vermin records kept during this period can make grim reading for the modern historian but also offers a glimpse of the wildlife hanging on in semi-wild places; in 1868 a pine martin was recorded but it is unknown if it was merely noted or shot as vermin. Other late nineteenth century entries include a White Tailed Sea Eagle and Rough Legged Buzzard, both now rare and highly protected.

During the 7th Earl’s tenure he also made some important planting additions to the park in the form of a collection of exotic tree species, including Monkey Puzzles and Cedar of Lebanon in the typical Victorian fashion, and these today define the character of the Little Matlock area in the south west. These now-mature exotic species intermingle with mature native trees to provide a designed character to the landscape quite different from the rest of the park.

Another significant change to occur during the Earl’s lifetime was the construction of the Cropston Reservoir in the late 1860s (it was operational in 1871). This covered over the site of the old rabbit warren and the keeper’s cottage, resulting in the reduction in the size of the park to its current extent and...
the creation of a new keeper’s cottage in its current location to the north of the Deer Barn. At the same
time a chain of silt ponds were constructed along the River Lyn to trap sediment flowing into the
reservoir, resulting in a series of waterfalls that further added to the picturesque qualities of Little
Matlock (although unsympathetic 20th century repairs have reduced their charm).

3.41 The reservoir had been built to provide clean drinking water for the growing city of Leicester and the
park also began to attract the limited leisure of the factory workers – from 1881 people would walk the
five miles to and from the park on holidays to enjoy the fresh air and open spaces.

3.42 The 7th Earl was fast dwindling his fortune through money spent on his estates and through gambling,
and he died the following year in 1883.

3.43 With no direct heirs, the 8th Earl of Stamford was a distant cousin, the Rev. Harry Grey, an alcoholic and
a clergyman who was shipped off to South Africa by his family where he married three times and never
returned to England. The 9th Earl was another cousin and very different from the disreputable reverend,
living in London with his family. The 7th Earl’s wife, Catherine, had meanwhile been left a life interest in
all her husband’s properties, and she divided her time between Enville and Bradgate, until Enville Hall
was badly damaged in a fire in 1904. Catherine died the following year in 1905, and according to her
husband’s will the three main Grey estates were split up – Dunham Massey going to the 9th Earl of
Stamford (later passed to the National Trust in 1976), Enville Hall rebuilt and passed to the family of
Catherine’s niece, Sarah Lititia, and the Leicestershire estates, including Bradgate, becoming the property
of the 7th Earl’s niece Katherine Duncombe. Katherine sold around 3,000 acres of her newly inherited
estate land, but initially kept Bradgate Park.

![Map Image](image-url)

*Figure 3.8: 1904 Ordnance Survey (showing similar layout to 1884 1st Edition OS)*
Figure 3.9: Late 19th century parkland layout
The ‘public’ park (1928 – present)

3.44 Bradgate was put up for sale in 1924, and bought by local industrialist Charles Bennion, who subsequently presented it to the city and county of Leicester ‘to be preserved in its natural state for the quiet enjoyment of the people of Leicestershire’, available for all time as a place of recreation in 1928. Since that time it has been administered by the Bradgate Park Trust.

3.45 Whilst the park was largely saved from major military upheaval during WWII, apparently on account of its intrinsic benefit as ‘public recreation’, it certainly did not remain unaffected. An archived account from local Thomas Moore describes its use as an infantry training ground ‘which did the deer no good at all’, although certain areas were apparently off limits to protect at least some of the wildlife. A series of photographs illustrate this training through a major military exercise known as the ‘Battle of Bradgate’, which involved large infantry units and various Bren Gun carriers and was apparently witnessed by thousands of spectators. A newspaper cutting reports the finding of a 3” mortar near old john in the 1950s.

3.46 The recent archaeological survey suggests that many of the earthwork features identified within the park may relate to 20th century wartime activity, including the digging of trenches and the explosion of mortar shells. However, it is recognised that this work in itself may have seen the adaptation or extension of earlier features; thus this period has added to the ‘confusion’ of understanding the previous phases of the park’s development.

3.47 Today the park remains an essential amenity for Leicester and the East Midlands despite the creep of development within its setting, which began post-war with the development of the Beaumont Leys suburb.

9 WW2 People’s War, BBC Archive, A2557028
Bradgate Park in 2013

Figure 3.10: 1969 aerial photograph
Figure 3.11: Modern aerial
4. The Ecology of Bradgate Park

Ecological history

4.1 There are no known pollen deposits to help ecologists understand how the vegetation of Charnwood Forest developed after the last Ice Age. However, traces of ancient woodland do survive in relic oak-lime woodland, which survive to the north and east of Bradgate Park. Woodland that survived clearance was commonly managed as pollard from the medieval period – pollards surviving within Bradgate being amongst the most notable examples. Bradgate being enclosed and developed as a deer park from the thirteenth century with an additional area of ‘conery’ or warren would both have contributed to the close grazed sward of the park and helped expose the rock outcrops.

4.2 The first account of the Park’s vegetation is provided in Bloxham (1829), which describes the Park as being dominated by bracken, with no mention of heathland or acid grassland, inferring a landscape similar to that today. The Park is described as follows “…mostly covered with the common fern or brakes, (pteris aquilina) and the projecting bare and abrupt rocks rising out here and there, with a few scattered gnarled and shivered oaks in their last stage of decay, present a scene of wilderness and desolation, highly contrasted with some of the adjoining beautiful valleys’ and fertile country. The trees were formerly much more numerous than at present, and many of the oaks were of a gigantic size, as is testified by their present existing state.”

4.3 By the nineteenth century the focus on fox hunting and game bird rearing at Bradgate witnessed both a substantial increase in ‘game bags’ and vermin kills – a record of 1868 mentions a Pine Martin Martes martes with Fitchets Mustela putorius (Polecats), herons Ardea cinerea, weasels Mustela nivalis and ‘Hawks and Owls’ being shot or trapped on the Stamford estate as well as cats and dogs!

4.4 Polecats are beginning to re-establish themselves in the greater forest area (2009). The last reliable sighting of the Red Squirrel Sciurus vulgaris was reported in the forest in the 1940s.

4.5 Records show that red (Lagopus lagopus scotia) and black grouse (Tetrae tetrix) continued to breed within Charnwood Forest until the mid-nineteenth century, but understood to be outside of Bradgate Park, while young conifer plantations created around Cropston Reservoir and more generally in the post-war period attracted Nightjar Chordeiles minor. Wood Warbler Phylloscopus sibilatrix, Woodcock Scolopax rusticola, Raven Corvus corax, Buzzard Buteo buteo and Redstart Phoenicurus phoenicurus were also present.

4.6 The Flora of Leicestershire and Rutland (Horwood and Noel, 1933) notes the presence of heather Calluna vulgaris at Bradgate Park, but gives no details of its extent or abundance at that time. The absence of a detailed description of heathland habitat, which was an uncommon habitat in the County at that time and would therefore probably warrant specific mention, combined with the reported dominance of dense bracken leads to a conclusion that heather was probably an uncommon species at the Park. Cross-leaved heath Erica tetralix was however listed as common at Bradgate Park in the 1933 local flora, but it was presumably restricted to poorly-drained areas of peat dominated by purple moor-grass Molinia caerulea.

4.7 P.A. Candlish produced the first known vegetation map of the Park in 1973. It confirms that the Park was dominated by bracken, with smaller areas of species poor, semi-natural grassland and wet Molinia grassland/remnant wet heath. The 1973 habitat map and associated report also included location details of key plant species, as follows:

- Heather Calluna vulgaris - Recorded in a non-flowering and dwarf state from a single location (covering only a few square yards) along a track east of the covered reservoir.
- Cross-leaved heath Erica tetralix - Confined to areas of purple moor-grass grassland, where it was found in considerable quantity, although in a dwarfed and almost flowerless state.
- Creeping willow Salix rpes - Found in four discrete areas of purple moor-grass grassland. This species was considered by Candlish to be the rarest species in the Park in terms of the County as a whole, with the only other Leicestershire location being at Charnwood Lodge.
• Bilberry *Vaccinium myrtillus* - Confined to the higher ground either on the edge of the Bracken or where it was thin. Dwarf and usually flowerless.

• Lesser skullcap *Scutellaria minor* - This species was frequent in the Park in the marshy areas especially around pools.

• Lemon scented-fern *Thelypteris limbosperma* (now *Oreopteris limbosperma*) - Found in the same situations as lesser skullcap.

4.8 A survey of ponds and watercourses within the Park was completed by P.A. Evans in 1990. The survey confirmed the presence of seven separate watercourse (drainage channel) systems and 11 ponds. The presence of lemon-scented fern, hard fern and cross-leaved heath was recorded along the ditches. Lemon-scented fern was a widespread species present in five of the seven systems, hard-fern was present in two of the systems and cross-leaved heath was present in one only (Hallgate Valley).

4.9 A map showing the extent of unmanaged bracken within Bradgate Park was produced by Natural England in 2013. This illustrates how much of the park was covered in bracken, which could have largely consisted of bracken and a small number of other plant species (see Figure 4.1 below).

4.10 Surveys of two of areas of wet heath, namely Hallgate Valley and land west of Sliding Stone Hill, were undertaken by Natural England in 2004.

4.11 The Sliding Stone Hill study area supported a mix of purple moor-grass and bracken with plant species noted including marsh pennywort *Hydrocotyle vulgaris*, wood anemone *Anemone nemorosa* and bluebell *Hyacinthoides non-scripta* beneath a bracken canopy, and some *Sphagnum* mosses. No ericaceous shrubs were noted in this area. The presence of Ancient Woodland indicators under the bracken canopy suggests that this part of the park may have supported veteran oak trees or woodland. This is supported by Bloxham in his account of Bradgate Park (Bloxham 1829) where he reports that veteran trees were formally numerous at that time.

4.12 The Hallagate Valley study area supported around 50% bracken cover, with open areas dominated by purple moor-grass tending to be wetter and floristically richer than those covered in bracken. Four patches of cross-leaved heath were recorded in this area, together with heather (one location only) and bilberry (one location only).

4.13 The Leicestershire and Rutland Wildlife Trust (LRWT) completed a survey of the vegetation of Bradgate Park in 2010. The survey report was produced by Michael Jeeves (the BSBI Vice-County recorder) on behalf of the Bradgate Park Trust in 2011 (LRWT, 2011).

4.14 The 2010 survey confirmed that the majority of the Park still supported extensive continuous bracken cover. However, some of the bracken was being managed mechanically by rolling in an effort to reduce the extent of bracken and increase the extent of grassland.

4.15 Areas of dry acid grassland, which included areas of bracken (where the dense litter layer was absent) were reported to support frequent heath bedstraw *Galium saxatile*, sheep’s-sorrel *Rumex acetosella* and tormentil *Potentilla erecta*. Other species recorded were rarer and included green ribbed-sedge *Carex binervis*, pill-sedge *C. pilulifera*, heath-grass *Dantonia decumbens* and heath milkwort *Polygala serpyllifolia*. Footpaths and tracks also supported these dry acid grassland species, and where footpaths crossed through wet grassland, additional species included common yellow-sedge *Carex demissa*, sharp-flowered rush *Juncus acutiformis* and slender rush *Juncus tenerus*.

4.16 The areas of wet grassland dominated by purple moor-grass were noted as rather species-poor, although a number of species (notable at a Leicestershire level) were found in association with this habitat, including cross leaved-heath, which was occasional in Hallgates Valley, creeping willow, creeping forget-me-not *Myosotis secunda*, marsh pennywort and lesser skullcap. The drainage grips in these wetland areas were also noted as supporting interesting vascular plants, including lemon-scented fern.

4.17 Around the ruins and old quarries, and other areas with rock and bare ground, was a distinctive community including upright chickweed *Moehringia erecta*, early forget-me-not *Myosotis ramossissima*, little mouse-ear *Cerastium semidecandrum* and early hair-grass *Aira praecox*.  

35
The ruins of Bradgate House support a range of traditional medicinal plants including deadly nightshade *Atropa belladonna*, feverfew *Tanacetum parthenium* and henbane *Hyoscyamus niger*, the later noted as the only nationally notable plant known to be present in the Park.

A map showing the extent of unmanaged bracken within Bradgate Park was produced by Natural England in 2013 (see Figure 4.1 below). This illustrates how much effort has gone into managing bracken since 2002 (See Figure 4.1). The management has led to a reduction in the extent of bracken but further management is still required because the bracken in managed areas will recover very quickly if current mechanical control is discontinued.

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**Summary Of Biodiversity Importance**

*Key Features of Interest*

The parkland habitats within Bradgate Park are included within Bradgate Park & Cropston Reservoir Site of Special Scientific Interest (SSSI). Unit 19 of the SSSI covers 288 ha and encompasses the veteran and ancient trees, plantation woodlands, streams, ponds and the dry grassland/heath habitats. Unit 20 covers 34 ha and encompasses the main areas of wet grassland/remnant wet heath habitat. Units 21, 22 and 23 of the SSSI cover land outside the parkland, which includes Cropston Reservoir, part of the Ancient Woodland at Hallgates, Dimminsdale pastures and plantation and Puddledyke.

The Parkland component of the SSSI is described by Natural England as “one of the finest remaining examples of ancient parkland in Leicestershire…. [and] contains some of the last remaining fragments of wet heathland in the County”. The SSSI citation highlights the following features as being of particular importance:

Rocky outcrops in the north of the Park that support rich saxicolous lichen communities and associated dry acidic grassland with patches of bilberry *Vaccinium myrtillus* – a scarce plant in the East Midlands.

Marshy ground to the north-east is dominated by purple moor-grass *Molinia caerulea*. A number of locally rare plants occur in this area, namely moonwort *Botrychium lunaria*, cross-leaved heath *Erica tetralix*, lemon-scented fern *Onopteris limbosperma*, creeping willow *Salix repens* and lesser skullcap *Scutellaria minor*. Small pools contain bog moss *Sphagnum* spp., and support breeding broad-bodied chaser dragonfly *Libellula depressa* and the water beetles *Hydroporus gyllenhali* and *H. longulus*, which are rare in Leicestershire.

Much of the southern part of the Park is dominated by bracken *Pteridium aquilinum*. Groves of old oak trees *Quercus* spp. occurs throughout this area: most are over 300 years old and many are hollow or decaying. Younger oaks have been planted in a series of walled enclosures. The ancient oaks support a range of characteristic invertebrate species including the nationally rare spider *Tetrilus macrophthalmus*. 
4.25 The Park supports a good variety of breeding and overwintering birds. Important breeding birds in the Park include Yellowhammer (the Park is a stronghold breeding site for this species in the County), Linnet, Meadow Pipit, Reed Bunting, Grey Wagtail, Spotted Flycatcher, Kingfisher, Kestrel, Tawny Owl, Little Owl and Buzzard10.

4.26 According to Natural England’s 2010 SSSI condition assessment, Unit 19 was in ‘unfavourable, but recovering’ condition as a result of positive site management in this area including standard tree planting and mechanical bracken control, and Unit 20, which corresponds to three patches of purple moor-grass dominated wet heath within the Park, was in ‘unfavourable and declining’ condition due to deer grazing and drainage. This condition has been since part rectified through the use of drainage grips to raise the level of the water table.

**Trees**

4.27 There are 504 living veteran and ancient trees in Bradgate Park. These include 346 old pollards, which represent the last survivors of a more extensive and larger population of ancient trees, which occurred throughout the park and which represent a unique and irreplaceable nature conservation and heritage resource. This is because the veteran and ancient trees illustrate and reflect past land use, cultural landscapes and provide important niches for a wide range of plants and animals. Several of these trees stand along the relic park pale. Deadwood also plays an important role at Bradgate through its influence on biological, physical and chemical processes, directly or indirectly providing a substrate for a wide range of organisms, particularly fungi and invertebrates. Deadwood management was seen to be particularly beneficial to wildlife in certain areas of the park compared with others, particularly the Deer Sanctuary which is closed to visitors and which contains the greatest concentration of the park’s veteran trees (52%). Other particularly important concentrations of veteran trees occur adjacent to the Deer Sanctuary in Little Matlock, and in a discreet pocket of Middle Park sheltered to the south of Dale Spinney and Coppice Plantation.

**Higher and Lower Plants**

4.28 The site supports a range of vegetation types with species poor U2 Deschampsia flexuosa grassland, U20c Pteridium aquilinum - Galium saxatile grassland and W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland NVC communities being more broadly and more extensively represented. These communities have been derived from a range of historical management practices but locally within these communities there are remnant fragments of more species rich vegetation types which reflect Bradgate Park’s importance as a biodiversity hotspot. These communities are not well defined but could include: U1 Festuca ovina - Agrostis capillaris - Rumex acetosella grassland, U4 Festuca ovina - Agrostis capillaris - Galium saxatile grassland, M16 Erica tetralix - Sphagnum compactum wet heath, M25 Molinia caerulea - Potentilla erecta mire, H9 Calluna vulgaris - Deschampsia flexuosa heath and W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland. These communities could be restored through more sympathetic and targeted management.

4.29 According to Jeeves (1993), Bradgate Park, together with Charnwood Lodge SSSI (managed by LRWT as one of its own nature reserves), contained in 1993 more locally notable plants than any other site in Leicestershire and Rutland. A list of the notable plant species was compiled by LWRT (2011).

4.30 A total of four nationally notable plants have been recorded from the Park and are listed below:

- **English eyebright** _Euphrasia anglica_ (Nationally Endangered) - No recent record.
- **Field gentian** _Gentianella campestris_ (Nationally Vulnerable) - No recent record.
- **Henbane** _Hyoscyamus niger_ (Nationally Vulnerable) - Present around the ruins in 2010.
- **Flat-stalked pondweed** _Potamogeton friesii_ (Nationally Scarce) - Last recorded from the Park in 1996.

4.31 In addition, a further 17 locally Scarce and 10 locally rare plants have been recorded from the Park, with 19 of these species having been recorded since 2010.

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4.32 The wide variety of habitats present at Bradgate Park, for example rocky outcrops, river edge, damp grassland and bare ground provide significant opportunities for bryophytes (mosses and liverworts) and the site is known to have considerable interest for this group. Several species of bog moss *Sphagnum* have been recorded from the Park (as reported by an undated British Bryological Society field note), among them being *S. molle, S. teres, S. subnitens, S. fallax* and *S. angustifolium*. Other species known to occur within the Park include the following acrocarps, *Polytrichum longisetum, P. formosum, P. commune, Pogonatum nanum, P. alides, Dichodontium pellucidum, Encalypta vulgaris,* and the pleurocarps *Philonotis fontana, Homalia trichomanoides, Campylium stellatum, Brachythecium populueum* and *Hypnum jutlandicum*. The liverworts which favour the boggy areas and ditches include *Calypogeia muelleriana, Cephalozia connivens, Lophozia excisa,* Jungermannia gracillima, *Scapania nemorea, Fossombronia pusilla* and *Riccardia chamedryfolia.*

4.33 Rocky outcrops and the boundary walls of the Park support regionally important saxicolous lichen communities.

4.34 Relic Ancient Woodland flora including bluebell, wood sorrel, wood anemone and Dog’s Mercury survives in Bradgate Park and are found associated with the veteran oaks and is also found beneath the bracken canopy in areas with no trees. The latter is probably a relict flora that was formerly associated with an ancient oak but has continued to survive under the bracken following the demise of the ancient tree. The Leicestershire Red Data Book notes 13 plants at Bradgate Park, which reflect the acid, nutrient poor soil. Among the more unusual plants is deadly nightshade *Atropa belladonna,* which is confined to lime rich areas associated with the mortar of the ruined house, and where visitors are alerted to its high toxicity by warning signs.

**Invertebrates**

4.35 Bradgate Park supports a range of habitats of value to invertebrates, including dry and damp acid grassland, ancient trees, woodland, water-bodies and bare ground associated with grazing and trampling, and the Park is of significant importance in this respect.

4.36 The Park features in a table compiled by Fowles *et al* (1999) that ranks the invertebrate interest of over 50 selected woods in Great Britain using a measure known as the Saproxylic Quality Index (SQI) – a measure used to evaluate wooded habitats for the conservation of dead-wood beetles. A total of six Leicestershire sites were listed by the table, including Bradgate, as shown in the Table 1, and highlighting the importance of the site for invertebrates.

<table>
<thead>
<tr>
<th>Site</th>
<th>SPP Qualifying spp</th>
<th>SQS Score</th>
<th>SQI Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donington Park</td>
<td>80</td>
<td>358</td>
<td>447.5</td>
</tr>
<tr>
<td>Buddon Wood</td>
<td>125</td>
<td>556</td>
<td>444.8</td>
</tr>
<tr>
<td>River Soar</td>
<td>67</td>
<td>242</td>
<td>361.2</td>
</tr>
<tr>
<td>Bradgate Park</td>
<td>73</td>
<td>306</td>
<td>360.0</td>
</tr>
<tr>
<td>Burley Wood</td>
<td>73</td>
<td>209</td>
<td>286.3</td>
</tr>
<tr>
<td>Croxton Park</td>
<td>52</td>
<td>144</td>
<td>276.9</td>
</tr>
</tbody>
</table>

Table 1: SQI for six Leicestershire woodland sites (after Fowles *et al*, 1999)

4.37 The Park is known to be an important site for notable spiders e.g. the nationally rare *Tetrilus macrophthalmus* (NE SSSI citation), harvestman e.g. *Megabunus diadema* (Daws, 1996), rove beetles e.g. *Ochthephilum fracticorne, Labrathium multipunctum, Gabrius splendidulus* and *Quedius scitus* (Lott, 2011) and craneflies e.g. *Prionocera turcica, Erioptera fuscipennis, Molophilus bilamatus, Molophilus nigri, Antocha vitripennis, Dicranomyia didyma* (Kramer, 2011).

4.38 It has been particularly well visited by coleopterists since the 1840s (Dott *et al*, 2011) with 93 species of beetle having been recorded11. The Park is known to have an interesting fauna associated with short-turf acid grassland including *Notiophilus aquaticus, N. geminiyi, Amara tibialis* and *Bradycellus ruficollis,* and aquatic beetles associated with the pools such as *Hydroporus gyllenhalii* and *H. longulus.* Several beetle species

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11 Dott *et al* (2011) states that several of these species should almost certainly be referred to the adjacent Cropston Reservoir which was not distinguished by the old collectors from the park itself.
associated with riverbanks (e.g. *Clivina collaris*, *Bembidion tibiale* and *Amara fulva*) are thought to have disappeared.

4.39 The park is of regional importance for its wood decay beetle fauna and supports the pselaphid *Plectophloeus nitidus* which is restricted to old wood pasture with a long history of ecological continuity. A cuckoo bee, *Nomada lathbriana*, Velvet Wasp *Mutilla europaea*, Green Tiger Beetle *Cicindela campestris* (recorded at Bradgate since at least 1840) and several unusual dung beetles including Minotaur Beetle *Tphaeus typhoeus*, Dor Beetle *Geotrupes vernalis* also occur at Bradgate Park.

4.40 Recent work by Ikin and Woodward (2013) suggests that Bradgate is the premier site for solitary bees in the county with 34 species having been recorded since 2010. This includes the nationally scarce *Andrena labiate*, and the locally notable *Andrena ovatula* (a new species to the county), *Andrena humilis* (an uncommon bee that prefers sandy soils which has not been not recorded in the county since 1983), and its cleptoparasite *Nomada integra* (a species not recorded in VC55 since 1943).

4.41 Many of these solitary bees are ‘mining bees’, which require bare or sparsely vegetated patches of soil such as banks and eroded paths, in which to make their nests and therefore overgrazing and trampling can be an important factor for mining bees. This disturbance factor is also important for other thermophilc species such as the green tiger beetle *Cicindela campestris*, which has survived for over 170 years at Bradgate Park, in one of only two Leicestershire locations.

**Reptiles and Amphibians**

4.42 Four reptile species have been recorded from Bradgate Park, namely common lizard (numerous individuals seen during the April 2014 walkover survey), slow worm, grass snake and adder. There are thought to be only three established populations of adders in Leicestershire and Rutland which are around the Bradgate Park area, at Ketton Quarry in the east of Rutland, and near Launde Abbey.

4.43 Five species of amphibian have been recorded from the SSSI according to the National Biodiversity Network (NBN), namely common frog, common toad, smooth newt, palmate newt and great crested newt. Specific details of these records, including dates and locations, are not known.

**Birds**

4.44 Bradgate Park supports a range of breeding birds with yellowhammer, reed bunting, skylark and meadow pipit all common within the open areas, together with several pairs of tree pipit (although breeding in the Park has declined from 14 pairs in 1994 to single figures in more recent years). Chaffinch, various warblers and tits are abundant in the woodlands, but redstart, whinchat and wood warblers are reported to no longer breed (Whinchat has not bred in the Park since 1989 and redstart since 1993). Nightjars used to breed in the Park in the in the first half of the twentieth century with two pairs reported to have bred in 1946 (Fray et al, 2009).

4.45 Little owls are still reported to be fairly common, particularly in the old oaks around the ruins of Bradgate House, whilst the spinneys still support Great Spotted Woodpecker and Green Woodpecker (although there have been no records of breeding Lesser Spotted Woodpecker for over 10 years). The River Lin supports grey wagtail and kingfisher, and occasional small flocks of Lesser Redpoll and Siskin are reported to be seen in the river-side alders. Amongst the more exotic birds historically associated with Bradgate Park are the peacocks and tumbling doves that still live in and around the ruins of the house. Other species noted include woodcock (overwintering but no confirmed breeding) and sparrowhawk (probable breeding but no direct evidence).

**Fish**

4.46 The River Lyn at Newtown Linford forms part of the Environment Agency’s fisheries core monitoring programme. A fisheries survey was undertaken by the EA in May 2006 and confirmed the River supported mainly brown trout. Also present were bullhead and brook lampreys, a species of conservation interest and protected under Annex II of the EC Habitats Directive. Overall, the catch at Newtown Linford was very good for a watercourse of this size.
5. **Description of Character Areas**

5.1 The Bradgate Park study area has been subdivided into 10 character areas for ease of analysis and description (Figure 4.1 below). A character area is a geographically discrete area that shares a number of distinct features or characteristics, enabling it to be classified as an entity with a distinct character in comparison with surrounding areas. The main factors that have been used to define these character areas include land use, vegetation, built fabric and historic associations.

5.2 Separating the study area into character areas facilitates assessment and understanding of the site as a whole, providing more manageable geographical units within which issues and opportunities can be identified and discussed. Whilst this framework facilitates analysis and discussion, however, the interrelationship between character areas and the surrounding landscape should not be forgotten.

*Figure 5.1: Bradgate Park Character Area map*
This Character Area comprises the Scheduled remains of Bradgate House and its former gardens surrounding it in the east and north. It is defined by the enclosing 18th century walling, which also incorporates a later paddock area to the north of the Tudor gardens.
Archaeology & Buildings

Bradgate House

5.4 The ruin of Bradgate House is both a Scheduled Monument (which includes its surrounding former garden and mill site) and a Grade II* Listed building. The house is, together with Kirby Muxloe Castle, one of the earliest brick built buildings in Leicestershire and is an early example of a country house built without defences. The house survives well as an archaeological feature and, together with the formal garden and watermill site, is an important medieval complex demonstrating the wealth of the very highest level of late medieval society. It was the birthplace of Lady Jane Grey, who became Queen of England, and was also visited by William III a century later. Sir William Cavendish and Bess of Hardwick, builders of Chatsworth and Hardwick Hall, married in the chapel in 1547.

5.5 The house was largely constructed by the 1st and 2nd Marquesses of Dorset from c.1500 in three periods of activity within the newly expanded deer park: the first between 1499-1507, when the 1st Marquess had begun preparation of the site and his son probably laid the foundations and began expanding the park, the second between 1509-11, following Thomas’s exile and prior to his involvement at court, and the third between 1523-30, after the lessening of Thomas’s royal duties up until his death. With its expensive use of brick, elegant proportions and use of large mullioned windows, Bradgate House was an early example of Tudor architecture, being the first unfortified stately home built in Leicestershire. It nevertheless still followed the traditional layout of a cross hall flanked by two wings, which later Elizabethan houses such as Hardwick Hall would depart from.

5.6 The house was constructed around three sides of a central courtyard, and its main entrance remains unclear – likely either from the north or the south, or possible both at various stages of its development. The house was altered over the centuries, most notably with the addition of a new bay window to the Great Hall in 1696 by the 2nd Earl of Stamford for the visit of William III, providing a view of the hills to the north. The house was abandoned in 1739 and recorded as a ruin by 1800.

The Garden

5.7 A garden was laid out to the north and east of the house in the typical formal arrangement, and is evidenced by the 1700 Knyff engraving and the 1746 Estate Map (apparently drawn up seven years after the abandonment of the house). These documents record a sunken parterre to the east of the house (1) surrounded by a raised terrace walk (2) on its four sides. This area is Grade II Listed as a ‘tiltyard’, which may indeed relate to its originally intended function (a tiltyard was an enclosed courtyard used for jousting and a common feature of Tudor palaces), although by at least 1700 it seems clear that the space provided a formal garden setting to house. To the eastern boundary of the parterre, a leat channelled water from the millpond in the north (8) to drive the mill in the south (3). To the east of this, an enclosure below the parterre (4) appears to have been planted as an orchard in its southern half in 1700, with a central loosely planted avenue which appears to have been strengthened by 1746 with the addition of the double avenue added to the east of the garden sometime during the first half of the 18th century.

5.8 To the north of the great hall lay an enclosed courtyard or north court (5). To the north of this lay two near-rectangular lawns, the western lawn (6) framed by a formal tree border and the eastern lawn (7) apparently a bowling green (the players just discernable on the Knyff engraving). East of these sat the millpond (8), providing a functional purpose as well as an aesthetic one. The area in the north-east corner of the garden (9) appears from the Knyff to have included areas of potager and may well have represented the productive part of the garden (an extension to the orchard in the south). The 1746 map
appears to suggest some rather haphazard water features, possibly stew ponds (10), with an orchard in the north corner, reinforcing the idea of this as productive garden space. The 1746 map also shows the later addition of a paddock to the north of the gardens.

5.9 To the south of the sunken parterre lay a slip garden (11), making use of the tall south-facing retaining wall for the further growing of fruit trees and vegetables.

1746 Estate map

Comparative Examples

Sissinghurst Castle, Kent.

Although Sissinghurst Castle is most commonly associated with garden makers Vita Sackville-West and Harold Nicholson from the 1930s, the brick manor house dates to the late 1490s following its purchase by Sir Thomas Baker, a wealthy London merchant. His son, Sir John Baker, rose to become Chancellor of the Exchequer and a Privy Councillor to Henry VIII, his main contribution to the house being the construction of the famous brick gatehouse, later housing Vita’s writing room. The house, gardens and a deer park were improved by his son, Richard, who entertained Elizabeth I at Sissinghurst for three nights in 1573. Gardens were set out in courts around the house but largely lost by the time the family let the castle to the government as a prison for French forces between 1756 – 63. The twentieth century gardens restored some of this layout, the meadow being understood to lie on the site of an even earlier twelfth century moated manor house.

Apethorpe Hall,

Acknowledged to be one of finest late medieval and Jacobean houses, Apethorpe is arranged around three courtyards. This sometime Royal property later became the seat of the Earls of Westmorland from 1617. Sophisticated gardens are known to have been created by the mid sixteenth and early seventeenth centuries yet the first depiction dates from the nineteenth century being a copy of an undated early eighteenth century map. This image records a bowling green centred on main range of the south front, with a broad formal walk flanked by statues in turn flanked by orchards and gardens leading west to a large wilderness bordering the deer park, which extended to the west and north. To the east a ‘gravel garden’ contained two pavilions (similar to those at Hardwick
Hall) with walks connecting to the hall. A later print c. 1721 records a similar arrangement. This form of garden broadly survived to be enhanced by Reginald Blomfield c. 1890 as an Arts and Crafts layer, which survives today.

Oxborough Castle

A moated ‘castle’ built from 1482 by the Bedingfeld family remained, despite its moat and crenellations a family home. The Bedingfeld’s have long been servants of the Crown, hereditary Royal Heralds while Sir Henry Bedingfeld (1509 – 1583) a staunch Catholic, acted as Princess Elizabeth’s custodian during her sister, Mary’s, reign – she later forgave him chiding him as her gaoler. Oxborough is an early brick house, broadly contemporary to Bradgate Park. Surviving earthworks evidence gardens laid out by mid sixteenth century in enclosures to the east and south, which remain the principal garden areas today. In the seventeenth century walks were set out to the north, close to the boundary defined by the village road, and to the far south. Later improvements to the gardens included a kitchen garden and parterre to the east as part of renovation works undertaken to Oxborough by A. W. N. Pugin and J. C. Buckler c. 1835. The parterre is commonly attributed to W. A. Nesfield although no definitive evidence has been found. The form (including part of the pale) of a deer park survives to the west of the hall and far east of the village in which some ancient oak pollards survive despite some simple nineteenth century landscaping.

Archaeological significance

5.10 The remains of the garden carry a high level of archaeological significance, with much of the outline of the Tudor garden as evidenced in the Knyff engraving and Kiddiar estate map surviving as earthworks within the current landscape, notably the sunken parterre and surrounding terrace, the millpond and leat, the hollows of former stew ponds and the terraces of other garden compartments including the bowling lawn and the north court. LiDAR has furthermore uncovered more information regarding the nature of the parterre, revealing what may have been an earlier circular layer to the Tudor design, if indeed not contemporaneous with the later symmetrical cross path layout. The garden area as a whole is likely to contain a wealth of below-ground archaeological interest, and should be targeted for further geophysical survey. The interest of this former garden as a cohesive archaeological feature is such that the Scheduled designation might be reviewed to cover the whole of the garden area, encompassing those elements within its original extent (excluding the Paddock as marked on the Kiddiar map).
Analysis of historic garden layout over modern aerial showing survival of key features
Trees & Woodland

5.11 The area contains 15 trees classed as veterans, mainly oak with a hawthorn, an ash and two sweet chestnuts, with three of the veteran oaks also classed as being ancient trees (one estimated at around 525 years old). The ancient oaks are likely to date from the early layout of the Tudor garden. There are also 28 historic trees, predominantly sycamore and horse chestnut. Two trees require limb removal (1703 & 1711), whilst an historic oak that is almost completely deadwood requires a risk assessment (1699).

Ecology

5.12 The enclosure supports a series of brick and stone ruins and walls, surrounded by very tightly deer grazed swards of species poor semi-natural grassland and bracken, and a large pond with ditch connections. Significant deer poaching was evident within the enclosure, particularly in areas of damp ground and across ditches. A group of 45 fallow deer were present in the enclosure during the April 2014 walkover.

5.13 The grassland around the ruins and immediately to the east includes perennial rye-grass, crested dog’s-tail, white clover Trifolium repens, common bent and annual meadow-grass, with species more characteristic of acid grassland such as heath wood-rush, tormentil, blinks Montia fontana and wall speedwell Veronica arvensis restricted to sloping banks.

5.14 The semi-natural grassland beyond the ruins to the north and northeast consisted of tightly grazed swards dominated by common bent and occasional heath wood-rush, creeping buttercup Ranunculus repens, common bird’s-foot trefoil Lotus corniculatus and tussocks of hard and soft rush. Other species present locally, particularly in association with the abundant anthills are sheep’s fescue, sticky mouse-ear Cerastium glomeratum, wall speedwell, common whitlowgrass Erophila verna, wavy bittercress, common dog violet and sheep’s sorrel.

5.15 The sunken parterre walls to the east comprised a mix of dilapidated brick and mortar and bare earth bank and support a range of grassland and ephemeral species including common whitlowgrass, sticky mouse-ear, sheep’s fescue, sheep’s sorrel, little mouse-ear Cerastium semidecandrum, wall speedwell, wavy bitter-cress, dandelion Taraxacum agg., nettle Urtica dioica, creeping cinquefoil Potentilla reptans, early forget-me-not Myosotis ramosissima and thyme-leaved sandwort Arenaria serpyllifolia.

5.16 The plant species recorded from the brickwork around the main house include herb-Robert Geranium robertianum, wall-rue Asplenium ruta-muraria, deadly nightshade Atropa belladonna, black spleenwort Asplenium adiantum-nigrum, flattened meadow-grass Poa compressa, sheep’s fescue, mouse-ear-hawkweed, common figwort Scrophularia nodosa, false brome Brachypodium sylvaticum and black medick Medicago lupulina.

5.17 The large pond comprised a shallow and heavily silted water-body with deer poached margins supporting a narrow fringe of soft-rush and sections of vertical stone bank protection.

Current Character & Use

5.18 The ruins provide a dramatic visual reference to the rich history of Bradgate Park with the red brick remains of the house, chapel and garden providing a defining feature in views from many parts of the park, particularly from the Newtown Linford approach, the current main entrance to the park. The survival of both built and earthwork remains of the house and formal gardens along with a number of veteran and ancient trees is remarkable and imparts a deep sense of time depth, whilst creating an intimate space in an otherwise quite open parkland landscape. Impressive views in all directions are afforded from the engineered plateau on which the enclosure sits.
Access to the ruins enclosure is limited to two and a half hours on a Wednesday, Thursday and Saturday and five hours on a Sunday from April – October which serves to protect the scheduled monument from high levels of footfall. However, this has resulted in the area acting as a deer sanctuary, which has resulted in heavy poaching in some areas of the enclosure, including waterside areas and beneath the canopy of veteran trees. The enclosure is also used for special events and outdoor performances.

The presence of a Quinquennial Review and evidence of recent repairs demonstrate active and sound management of the built structures within the enclosure. However, the poaching of waterside areas is conspicuous and the gradual decay of a number of walls appears to have been accelerated by livestock trampling. Evidence of burrowing animals (moles) and vehicle tyre rutting was noted during the survey.

The avenue to the east side of the garden as recorded on the 1746 estate map has been replanted within the enclosure and a small number of other trees have been planted throughout the area. A number of self-sown trees have established along the main canalised stream and, although the condition of the historic water management infrastructure is relatively poor, the partial survival of the ponds in the east of the enclosure as depicted in the 1746 estate map is of great interest. The network of channels and ponds is not fully understood and their productive and functional use within the gardened setting is of significant interest.

A number of picnic and other benches are scattered throughout the area and the presence of deadly nightshade is highlighted by a series of signs. The walled enclosure to the south of the complex appears to be overgrown and is not open to public access. This was a slip garden, used most recently as a tree nursery for growing on local provenance trees from seed collected on the park and also for raising plants for the garden areas.
### Key Significance
- Rare surviving built and earthwork remains of the Tudor and later formal gardens
- The grade II* listed Chapel and Mansion ruins
- The grade II listed tittyard
- The grade II* listed garden wall
- The house and garden site is designated as a Scheduled Monument
- Collection of ancient and veteran trees
- Extant water management system
- 18th century stone walling
- Potential for below-ground archaeology

### Key Issues
- Heavy poaching of some parts of the Scheduled Monument including waterside areas and beneath the canopy of veteran trees
- Poor condition and gradual decline of some of the garden retaining walls
- Poor condition of the historic water management system
- Lack of understanding of the historic water management system
- Presence of deadly nightshade and associated threat to human life
- Lack of access to the walled enclosure to the south of the garden (potential opportunity?)
- Limited coverage of Scheduled Monument designation
- Need to monitor effects of events upon the garden remains
CHARACTER AREA 2: HIGH PARK

5.23 This Character Area covers the northwestern section of the park with Middle Park lying directly to the south. The western and northern boundaries are defined by a dry stone park wall from which the ground rises to form a series of knolls containing the highest points within the park.
Archaeology & buildings

Old John Tower

5.24 Old John Tower is a Grade II Listed structure built in c1787, forming a distinctive landmark on the highest point of Bradgate Park. It is a circular Gothic style tower of two storeys, with four pointed arch windows, ground floor blanks and upper with renewed Y tracery, partly boarded, with one blocked. Construction is of granite and slate rubblestone with brick window dressings. Other details include a bracketed cornice and battlements and a doorway with pointed arch and door. The tower is a Georgian folly built on the top of a lofty former windmill hill in the park, to form a feature and to enable enjoyment of the magnificent views to be had, as well as to watch the various sporting endeavours undertaken within the park during this time. Beneath the tower on its southern side, the site of the former stables built into the hillside remains a prominent extant feature. The tower is very similar in design to Mow Cop Castle, which was built in 1754 as a summerhouse for Rode Hall for the Wilbraham family (and now forms part of the National Trust property of Little Moreton Hall), and may well have provided the inspiration for its construction.

Leicestershire Yeomanry War Memorial

5.25 The War Memorial is a Grade II Listed structure added in c.1920 on the knoll adjacent to Old John Tower, forming another notable landmark to the north of the park. Construction is of granite chip concrete obelisk of c10m on a stepped plinth, incorporating a cross in design with wreaths on its sides. Metal plaques and regimental crests commemorate the fallen of the Boer and both World Wars.

Archaeological evidence

5.26 147 potential features including banks, ditches and enclosed areas have been identified in the LiDAR data. 113 of these are of unknown date. To the east, west, southwest and north of Old John are series of banks and ditches that divide up the area into smaller blocks. On the basis of their form and that they do not clearly belong to later periods, it is suggested that these are possible evidence of late Prehistoric field systems. However, it is recognised that the field systems are undated and their dating is speculative (Hartley and Squires forthcoming also suggest “Romano-British”). Detailed study of the LiDAR data has led to the identification of possible platforms within terraces on the eastern side of Old John, and these may potentially be house platforms contemporary with the suggested field systems.

5.27 To the north of Old John, a sub-square enclosure some 40m across survives. This appears to predate the race track (below) and could be of Prehistoric or possibly medieval origin. If the interpretation of any of these remains as pre-medieval in date is correct, these features would be of high significance as they are regionally extremely rare.

5.28 Evidence of a possible new phase of medieval enclosure has been identified in the LiDAR data between Sliding Stone enclosure and Dale Spinney. A north-south bank is abutted by a Park Pale boundary, and would appear to predate the Park Pale. This feature can be traced north for over 500m.
5.29 Two probable Pillow mounds (Rabbit Warrens) of late Medieval or Early Post Medieval date can be identified in the extreme south west of the area (the adjacent road is named Warren Hills).

5.30 The course of an 18th Century race track which encircled Old John can be traced with some confidence in the LiDAR data as the boundary stones which marked each side of the track are visible on the western and northern sides. Within Old John Spinney, the remains of a square enclosure some 40mx40m are evidence of some previous structure.

5.31 In the extreme east of the area, a series of sharply incised sinuous ditches are visible just within the park’s boundary. Previous authors have suggested that these may have a prehistoric origin but this is considered most unlikely. That they have resulted from wartime activity (which is now starting to emerge within the Park’s recent history) is considered much more likely.

Geology

5.32 This character area contains a large number of the park’s key geological assets, as follows:

- Hunts Hill SK524 116. Outcrops of Sandhills Lodge Member volcaniclastic rocks of the Beacon Hill Formation, the oldest rocks in the Park.
- The Old Stable under Old John SK526 112 Precambrian fossils with good examples of sedimentary strata.
- Outcrop north of Old John SK526 112 Precambrian fossils with volcaniclastic rocks or tuffs immediately around of which bedding planes and cleavage planes are exposed. The absence of significant cross bedding and ripple marking suggests that these strata were deposited below storm wave depth (i.e. 50m). Boulder clay is audible underneath the paths approaching Old John.
- Memorial Crags SK 523 111 Precambrian fossils.
- Sliding Stone Spinney SK531 114. This prominent craggy outcrop exposing Sliding Stone Slump Breccia is an important geological marker horizon around Charnwood Forest. The horizon contains distorted layers of volcaniclastic sediments perhaps triggered by earthquake activity containing lumps of finer grained mudstone. One formation is known as the ‘Swiss Roll’ which is up to 0.6m long together with rare ‘hour glass’ shapes of mudstone found on fallen blocks on the south side of this location.
- Park Breccia SK531 115. The type locality for the Park Breccia an important marker horizon in the volcaniclastic rocks.
- Possible Roche Moutonees SK532 112. Glacially moulded masses of rock with a smooth side and steep irregular downside.
- This area also most effectively demonstrates the topography of the Park and the wider views that it presents of the local and more distant landscape. This is related to its geological history and allows placement of the Park in a wider context.
5.33 Issues with the on-going conservation and preservation of the area’s sensitive geology are largely related to vandalism and damage to the bedding planes of the Memorial Crags.

![Sign dissuading access to the Memorial Crags](image1)  ![Graffiti on the Memorial Crags](image2)

**Trees & Woodland**

5.34 Two blocks of woodland are present within the character area. The first is Sliding Stone Enclosure to the east of the area, which comprises a mature plantation of larch with a few beech *Fagus sylvatica* and a poor bracken dominated ground layer. The northeastern corner of the woodland has been clear felled and replanted mainly with oak. Old John Spinney is a small copse of well-spaced mature oaks, and occasional Scots pine with a short acid grassland ground layer. The elevated position of the spinney results in an exposed aspect and a wind blown Scots pine was noted.

5.35 There are 5 veteran pollards recorded within High Park (4 sweet chestnut and 1 oak), with a management action required on one of them to remove adjacent encroaching trees.

**Ecology**

5.36 This large and open character area is dominated by large expanses of bracken with pockets of acid grassland and occasional woodland blocks. It also supports three of the largest areas of wet grassland/remnant wet heath within the Park.

5.37 Bracken once formed a dense continuous stands over much of High Park. The majority is now managed by mechanical rolling and this has helped to reduce bracken cover and has encouraged acid grassland vegetation to re-colonise the bracken litter with scattered plants of sheep’s sorrel, heath bedstraw, creeping soft grass *Holcus mollis*, Yorkshire-fog and common bent. Where bracken continues to grow, occasional plants of bluebell and wood anemone *Anemone nemorosa*, are being increasingly seen as they favour the summer shade beneath the bracken canopy.

5.38 The majority of the acid grassland across the character area is relatively species-poor and dominated by a mix of common bent, red fescue, together with other commonplace grasses, but with few forbs. However, the freely drained hilltops and shallow soils around rocky outcrops such as those close to the War Memorial and Old John Tower, together with trodden footpath edges, support a distinct assemblage of open and parched acid grassland with a significant bare ground component. They are perhaps the best examples of the U1 NVC type acid grassland community within the Park, although the habitat is still generally species poor. Preferential species in these locations included mat-grass *Nardus stricta*, heath grass *Dactyloctenium aegilops*, sheep’s fescue, heath bedstraw, and the mosses *Campylopus introflexus* and *Polytrichum piliferum*. Patches of purple moor-grass and rushes are present locally in areas that are poorly drained and around edges of ponds. The path edges also support a regionally important wax cap fungi assemblage.

5.39 Three areas of wet grassland/remnant wet heath dominated by purple moor-grass are present towards the north of the character area. Hallgate Valley is located in the northeast of the Park, and supports the largest area (c. 6 ha) of damp acid grassland within the Park. The second area is located within a smaller valley to the west near to Sliding Stone Enclosure. The third area lies in the valley below Old John.
between Sliding Hill Wood and Bowling Green Wood. As a whole, this habitat is a key feature of the site’s SSSI designation, but the areas are currently considered to be in ‘unfavourable and declining’ condition due to higher grazing pressures and drainage, although the use of drainage grips post SSSI assessment has improved the condition of the units by raising the water table.

5.40 The wet grassland/remnant wet heath comprises species-poor vegetation dominated entirely by purple moor-grass, interspersed with patches of bracken and acid grassland, and dissected by a network of drainage grips and rush-edged pools. The drainage grips have been created to improve the drainage of these areas and their effect has almost certainly been detrimental to the ecological condition of the wetland habitat.

5.41 The best areas of remaining wet grassland/remnant wet heath are typically located above the drainage grip channels and in seepage areas, and support a range of associated wet grassland plants including velvet bent *Agrostis canina*, tormentil *Potentilla erecta*, greater bird's-foot-trefoil *Lotus pedunculatus*, marsh pennywort *Hydrocotyle vulgaris* and sedges *Carex* species. No evidence of heather *Calluna vulgaris* or cross leaved-heath *Erica tetralix* was seen during the walkover in April 2014 despite brief searches in locations at Hallgate Valley where these species had been reported previously.

5.42 The drainage grips comprised of steep-sided, mostly seasonally-dry channels, around 1.5 m deep and lacked in channel aquatic plants. Frequent plants of lemon scented fern *Oreopteris limbosperma*, and a few plants of bilberry *Vaccinium myrtillus* were present along the channel sides.

**Current Character & Use**

5.43 High Park is defined by its elevated landform and open moorland character with prominent and distinctive rock outcrops and knolls. Old John Tower is a distinctive feature towards the west, situated on the highest knoll in the park (at 212m), as is the war memorial on the adjacent knoll. Both are prominent in views from the south, and long panoramic views are afforded from these points in all directions.

5.44 The area is well used by walkers, dog walkers and horse riders, with a gateway being provided in the northwest corner of the area. A toilet facility is provided just outside of the park gate to the west and site furniture is concentrated close by and comprises signage, benches and picnic benches and a litter bin enclosed in stone. The park wall appears to be generally in a good condition, although tree and scrub adjacent to the exterior face of the stone boundary wall is potentially causing damage to the integrity of the wall and to the saxicolous lichen communities associated with the wall.

*View from the north west corner of the park towards Sliding Stone Enclosure with several birch clumps in the middle distance*

5.45 The modern conifer plantation woodland within Sliding Stone Enclosure stands out as a more regularised feature than the other plantations within the park, with their softened edges created by mixed or broadleaved planting. A series of birch clumps to the west of the enclosure sit uneasily within the landscape context, as they do not form sufficiently strong clump formations in the way that for example, oak, lime or chestnut would. A modern underground reservoir lies between Sliding Stone Enclosure and
the northern park wall and the regularly mown brighter green amenity grass, established on spoil from the reservoir construction, is conspicuous in some views.

5.46 Geological outcrops in this area are of great significance and add to the visual character of the area, although as noted above they are vulnerable to vandalism and theft.

5.47 Old John Spinney, which still contains some of its original late nineteenth century trees, lies to the south of Old John Tower and is the only walled spinney that is open to public access within the park. The wall is in a good condition, although a very short section of the upper courses of the wall had collapsed at the time of survey.

### Key Significance

- Old John Tower (Grade II listed)
- Leicestershire Yeomanry War Memorial (Grade II listed)
- Highest point in the park with extensive panoramic views
- Geological and earth science interest, containing over half of the park’s key geological assets
- Pockets of acid grassland
- Early 19th century spinneys
- Archaeological evidence, including possible prehistoric and medieval features, as well as the C18th racetrack

### Key Issues

- Large expanses of bracken
- The three areas of wet grassland/remnant heath as a key feature of the site’s SSSI designation, are both currently considered to be in ‘unfavourable and declining’ condition due to higher grazing pressures and drainage
- Tree and scrub growth adjacent to exterior face of the stone boundary wall potentially causing damage
- Vulnerability of the geological interest through vandalism and theft
- Lack of interpretation of the former stables below Old John Tower
- Intrusive planted elements including the conifer plantation within Sliding Stone Spinney and the birch clumps to the west
- Small section of collapsed stone wall to Old John Spinney
- Visual appearance of modern reservoir
CHARACTER AREA 3: MIDDLE PARK

5.48 This Character Area defines a band running across the centre of the park, forming the lower slopes of High Park. The boundary with High Park is loosely defined and should be considered more as an invisible administrative boundary as the character is similar.
Archaeology

Medieval

5.49 The Middle Park contains the majority of the northern area of the medieval deer park. The exact line of the pale can be traced with accuracy from the LiDAR data, and there is some deviation from the recorded line.

5.50 Ridge and Furrow can be found in the extreme west of the area.

5.51 Further traces of terraces, as yet undated, can be identified to the south and to the east of Tyburn and it is speculated that they are possible Iron Age field systems. South of Elder Plantation, a sharply defined curving ditch may form the south-western part of a possible enclosure of around 1ha which is bisected by the medieval pale. As this ditch is medieval or earlier, it is of medium or higher significance.

5.52 Between Bowling Green Spinney and Dale Spinney ditches and banks marking linear features crossing south-west to north-east may stem from medieval holloways crossing this area on the east side of the stream which is flowing down toward the fishpond area.

5.53 In places, the features appear in parallel lines, and this has led to an interpretation that a Bronze Age triple ditch boundary may survive in this area. Although this is possible, the likelihood is that these remains relate to medieval occupation.

5.54 Evidence of a possible new phase of medieval park enclosure has been identified in the LiDAR data between Sliding Stone enclosure and Dale Spinney. A north-south bank is abutted by the known Park Pale boundary, and would appear to predate the Park Pale. This feature extends into the High Park and can be traced north for over 500m.

5.55 The Park Pale can not be clearly traced to the east of this north-south feature although it can possibly be identified on the south eastern edge of Dale Spinney and it is likely that rocky outcrop formed much of the park’s boundary in this area.

LiDAR data suggesting a possible new phase of medieval park enclosure

Post-medieval

5.56 To the south of the intersection of the known Pale and the newly identified north-south feature, 30 pits have been identified within an area 60mx70m. The features, which vary between 1.5 and 3m in diameter, are arranged in both clusters, and lines. Some appear to be intercutting, although most are discrete. It has been suggested that these features stem from a prehistoric pit alignment boundary and if this were to be the case, these would be of high significance for the survival of earthworks of this date. Although this remains an outside possibility, the features are immediately adjacent to an area of bare soil bank, which contains visible ammunition/bullets. It is suggested that these features evidence WWII training activity,
which is now being identified as part of the Park’s history, as a training area and for the staging of a mock battle in 1942.

5.57  A small rectangular mark associated with a possible track to the south of Dale Spinney may relate to the building showing in the foreground of the Knyff illustration (1700).

5.58  In the south east of the area, a series of parallel and sinuous ditch features have been identified. These appear superficially similar to those identified in the northeast of the High Park and may well have a similar military origin.

5.59  Drainage features can be strongly identified in herringbone type configuration between Tyburn and Elder Plantation, and these are of 19th or 20th Century date.

Trees & Woodland

5.60  This Character Area contains 53 trees classed as veterans, 6 of which are ancient, all of them oak and the majority pollards. The greatest concentration of these occurs in the east of the area to the south of Dale Spinney and Coppice Plantation, resulting in a notable area of wood pasture with some outstanding and characterful veteran trees, quite different in character from the rest of Middle and High Park and more akin to the collections in the Deer Sanctuary. The area also includes one of the oldest trees in the park, tree no. 2999 located within the southern boundary of Bowling Green Spinney and estimated at over an incredible 800 years old. There are 18 trees within the area, which are recommended for further management, predominantly constituting pollarding or crown reduction works.

The collection of veteran and ancient trees in the east of the area of great note and character

Tree no.2999: an ancient oak within Bowling Green Spinney estimated to be over 800 years old
Elder Plantation and Bowling Green Spinney are both copses of mature oak that lack an understorey of young trees or shrubs and support a ground layer of bracken and bramble, together with abundant bluebell and occasional foxglove. Some Monterey pines *Pinus radiata* have been recently planted within Elder Plantation and Bowling Green Spinney contains occasional mature Scots pine. Bowling Green Spinney contains a huge ancient oak pollard (see above). Recent planting within timber tree guards in Bowling Green Spinney has not survived and Elder Plantation has large open areas following felling.

Dale Spinney is a mature Scots pine plantation, with occasional semi-mature oak, birch, beech, sweet chestnut and larch. The understorey comprises sparse rowan and holly, with some replanting of oak and rowan. The ground layer is sparse with patches of bracken, bramble, bluebell, foxglove, creeping soft grass *Holcus mollis* and Yorkshire-fog.

Coppice Plantation is a dense plantation of Scots pine, with frequent larch and occasional birch and a bracken dominated ground layer. The plantation is fenced to exclude deer and appears to be managed for timber production. This planting has experienced fire and replanting on at least two occasions since its establishment.

Evidence of squirrel damage was noted within a number of the plantations.

**Geology**

This area contains one of the park's key geological assets at Coppice Plantation SK542 109, which has outcrops exposing the possible base of the Cambrian Brand Group (Hallgate Member) and a sedimentary channel deposit of the Hanging Rocks Conglomerate rather than the underlying Bradgate Formation. The rock is characterised by dark and angular rocks, slumping strata and content of well-rounded volcanic pebbles. A quarry at the southern end of the plantation exposes volcaniclastic mudstone and siltstone with fine silts containing fragments of quartz and feldspar – degraded or recrystallized volcanic ash.

**Ecology**

Middle Park occupies a southwest to northeast belt through the centre of the Park and forms a substantial tract of open parkland along a southeast-facing slope, including an area with high veteran tree interest between Dale Spinney and Coppice Plantation. The area is dominated by managed and unmanaged bracken, together with patches of acid grassland and four relatively large (c.6 ha) woodland blocks spread out along the length of the character area.

The ground vegetation includes extensive areas of managed bracken that has been managed by mechanical rolling and is showing signs of reverting to grassland. The area also supports some established areas species poor semi-natural grassland, with occasional patches of rushes and dense unmanaged bracken on steep slopes and around tree clusters. The majority of the grassland is comprised of common bent and red fescue, together with a range of other acid and neutral grassland species such as sheep’s sorrel, sweet vernal-grass and crested dog’s-tail.

Small and indistinct drainage channel networks are present in shallow valleys between the woodland blocks and support occasional ponds and patches of species-poor wet grassland dominated by purple moor-grass and rushes. These areas are in a degraded condition, presumably through excessive drainage and grazing and lack the extensive continuous cover associated with the damp grassland patches in the north of the Park. Some pools and ponds, and wet sections of the drainage grips, do however support wetland species, including a range of rushes, floating sweet-grass *Glyceria fluitans*, round-leaved crowfoot *Ranunculus omiophyllus* (seen at a single pond in the west of the character area) and occasional patches of *Sphagnum* moss.

**Current Character & Use**

Middle Park lies across the undulating ground below High Park and is dominated by four of the Park’s 19th century spinneys, occurring on the high points within the area and enclosed by characteristic stone walling. Much of the stone walling is in a good condition, although small sections of collapse were
recorded in Dale Spinney and Bowling Green Spinney. The mixed plantation character throughout
many of the spinneys survives through mature oak and Scots pine planting, serving to accentuate higher
points of the landform, although some areas of the spinneys are open and their on-going management
requires consideration.

5.70 The open space between the large-scale spinneys is occasionally punctuated with historic specimen trees
and to the east a finer collection of veteran trees (see above) add to the visual interest and character of
the area.

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CHARACTER AREA 4: LOW PARK

This Character Area forms a small area of park to the east of Bradgate House ruins enclosure, comprising Deer Park Spinney in the north, with the 19th century Lodge lying along its boundary, and the Deer Barn buildings in the south which today house the estate office, museum and café.
Archaeology & buildings

5.72 This area contains the continuation of the suggested northwest south-east trackway suspected to be of medieval date. To the south of Deer Park Spinney, and second trackway leaves at a right angle heading toward the south-eastern corner of the Ruins Enclosure. A series of rectangular parcels of land have been identified to the north of this trackway, and it is suggested that these may be the remains of medieval settlement.

5.73 To the north of this group is a strongly defined 14m square-ditched enclosure. It is of unknown purpose and date, although it is assumed that it is contemporary with a phase of occupation of the house.

5.74 The Deer Barn and Keeper’s Lodge were added in the 19th century with the retrenchment of the park following the creation of the Cropston reservoir in the 1860s. Today the Deer Barn houses the estate office, café, visitor centre and deer larder, whilst the Keeper’s Lodge provides a private residence.

Geology

5.75 This area contains one of the park’s key geological assets in Deer Barn Spinney SK538 105, being an outcrop containing Cambrian fossils close to the Precambrian-Cambrian junction.

Trees & Woodland

5.76 This area contains 38 trees that have been classified as being either historic or veteran, all of them oak except for a Norway spruce, none being classed as ancient. Only the Norway spruce (2998) has been identified as requiring further management to carry out a tree risk assessment due to extensive basal decay and old flaying damage to its trunk.

5.77 Deer Park Spinney comprises a small copse with an open canopy of mainly mature oak standards, and occasional early mature Scots pine. The woodland lacks understorey shrubs, and supports a ground layer dominated by bracken, and with a few patches of bluebell and Yorkshire-fog/creeping soft grass Holcus mollis.

Ecology

5.78 Low Park supports mosaics of species poor semi-natural grassland and managed bracken, with occasional parkland trees and a single woodland block.

5.79 The grassland forms a relatively uniform sward of semi-improved acid grassland of common bent, Yorkshire-fog, red fescue, with occasional anthills.

Current Character & Use

5.80 Low Park is set on gently sloping land, which falls to the southeast until the current park boundary meets the reservoir and contains two significant historic buildings, including the Lodge and Deer Barn. Today
the Deer Barn is the main visitor hub and contains the estate office and associated yard, which now includes a fully functional deer larder, a visitor centre and café. These facilities provide a draw to large numbers of visitors walking from both the Hallgates car park to the north and the Newton Linford car park to the west. Some parts of the Deer Barn complex remain underused and offer potential opportunities for alternative commercial or visitor use.

5.81 The Victorian lodge is set against the southeastern edge of Deer Park Spinney, which provides an impressive backdrop to the building, although views to the Lodge are now partially concealed by trees and garden planting. The Lodge and its garden are enclosed by 19th century deer height iron railings and gates, which survive in good condition.

5.82 The wall surrounding Deer Park Spinney is in a good condition and within the spinney a rocky outcrop crowned with a Scots pine adds a picturesque element from which impressive views out across the reservoir can be gained. A modern garage to the rear of the Lodge represents an incongruent feature out of context with its surroundings.

5.83 A grove of oak trees was planted in 2012 to the south of the Lodge by the Bradgate Park Trust to commemorate the contribution of Michael Harrison, who was land agent and surveyor at Bradgate Park from 1961 – 2012.

Key Significance

- Areas of species poor semi-natural grassland with anthills
- Early 19th century spinney
- Unlisted but regionally significant historic buildings including the Lodge and the Deer Barn
- Evidence of medieval occupation is suspected to extend across parts of this area
- Key geological asset in Deer Barn Spinney
- Collection of historic and veteran trees
- The current uses of the historic buildings which house the management team and some of their equipment, a museum and a game larder
- 18th century stone wall
- Michael Harrison Oak Grove
**Key Issues**

- Garden planting to the Lodge conceal views from the wider parkland
- Further commercial or visitor related opportunities within underused parts of the Deer Barn complex
- Large areas of bracken
- On-going management of spinney
- Incongruent appearance of modern garage to the rear of the Lodge
This Character Area lies predominantly to the west of the Ruins Enclosure, being a flat, open area of grassland historically used for deer management. The southern boundary is defined by the tarmac bridleway whilst to the north by an 18th century stonewall.
Archaeology

5.85 This area contains an area of Late Upper Palaeolithic (Creswellian) open occupation which is of High to Very High Significance, as this type and date of site is internationally rare. Recent excavations were undertaken at the site as part of this Plan, confirming its importance (see summary box below and full survey report in Appendix 2 for more detail).

Summary of the Late Upper Palaeolithic (Creswellian) site survey

Recent excavations of the site (Cooper & Harvey, 2014) have produced further finds that fit with a Creswellian identity, previously known large groups of worked flints recovered from an eroding footpath within the park to the west of Newtown Lawns from 2001 onwards (NGR 45280 31010). The Cheddar Point from TP2 is the most diagnostic of the artefacts but the other tools also fit a Later Upper Palaeolithic designation. Some evidence for the Magdalenian en éperon technique in core platform preparation was recorded: in the UK this only occurs with Creswellian technology.

There are approximately 35 sites of Creswellian (Late Magdalenian) identity, mostly from England, but including a few sites in the Netherlands and Belgium. In the UK, however, there are only three 'clean' open air sites at Guildford Fire Station and Wey Manor Farm, both in Surrey and the Bradgate Park site. Research of this site has contributed significantly to an understanding of the Late Glacial archaeology of North-west Europe. The assemblage recovered/excavated from Bradgate Park and the surviving in situ site can be described as of national, arguably international, significance. In terms of Cultural Heritage the site is of Very High Value in that it can contribute significantly to acknowledged international research objectives, such as those outlined in the Ancient Human Occupation of Britain project (international phase 3): Dispersals of Early Humans: Adaptations, frontiers and new territories. In terms of English Heritage designation criteria the site is a significant place with high evidential, historical and aesthetic value.

5.86 A moated site (Scheduled Monument 108813) some 176m to the west of the house ruins has been sharply defined from the Lidar data with some further detail on earthworks on the south-western side, and a suggestion of a building within the enclosure. This site is historically interpreted as a keeper’s lodge. 75m to the north a second rectangular enclosure of similar size to the moated site has been identified. This appears to be associated with a series of linear features, which may be acting as water supplies to the moated site to the south. The site is an important survival of a medieval lodge contained within a well-documented deer park. The site survives well, and the island site is likely to retain evidence of medieval lodge buildings. Whether the lodge housed the parker for the medieval deer park or provided a grander residence is unclear, although the scale of it may suggest the latter – further survey work is required to enhance our understanding.

5.87 According to HER evidence, and following consideration of the Knyff engraving, the site of the dog kennels MLE18598 to the south of the house ruins are in the east of the area. This area currently is disturbed ground with possible foundation stone visible due to some erosion.

5.88 Similarly, the HER records part of the area of stables that served the house fall within this area, and is visible as a ditch with some brickwork in places.

5.89 Other features include possible building footprints, and linear ditches in the east of the area.
Geology
5.90 This area contains one of the park’s key geological assets within the Stable Pit (SK534 101) to the south of Bradgate House. The type locality of the Stable Pit Quartzite Member of the Cambrian Brand Group exposed beneath glacial till. There is evidence of folding, faulting and a diorite dyke.

Trees & Woodland
5.91 There are 6 veteran and 2 historic trees within the character area, located near to the boundaries of either the Ruins Enclosure or Little Matlock, with the main body of the area itself largely devoid of planting.

Ecology
5.92 This character area consists of open and tightly deer grazed species poor semi-natural grassland and is well used by the public for picnicking and recreation activities. Some areas close to the footpaths and the ruin enclosure lack a distinct acid grassland component and are dominated by a mix of common bent, crested dog’s-tail, Yorkshire-fog, perennial rye-grass and annual meadow-grass *Poa annua*, with forbs such as common sorrel *Rumex acetosa*. In the main grassland particularly in locations where anthills are abundant, heath wood-rush, sheep’s-sorrel and tormentil were recorded.

5.93 Patches of bracken have been rolled across this character area and the species forms scattered and sparse stands as a result of this management.

Current Character & Use
5.94 Newton Lawns is a flat, open area of grassland that provides the immediate setting and simple foil to Bradgate House and Garden. A readily legible link to the medieval history of the park is provided by the Scheduled earthwork remains of the moated house to the west of the area, whilst to the west of this lies the internationally important Upper Palaeolithic site.

5.95 Visitor pressure is readily apparent within this area through the presence of bare earth to the west where desire lines and honey pot sites exist, and limited sections of the Scheduled Monument and the Upper Palaeolithic site have been heavily eroded. A number of litterbins are located within the centre of the area.

A view across Newton Lawns towards Bradgate House ruins highlighting the damage to the leat in the foreground. Litterbins can be seen in the middle ground with Deer Park Spinney to the far left and the main arterial route through the park to the right.
**Key Significance**

- The internationally significant Late Upper Palaeolithic site
- The Scheduled moated lodge site
- Archaeology relating to Bradgate House, including dog kennels, stables & leat
- Key geological asset within the Stable Pit
- A popular area for recreation
- 18th century stone wall
- Small collection of veteran and historic trees along fringes

**Key Issues**

- Erosion to the Upper Palaeolithic site in the west due to visitor pressure
- Eroded sections of the leat due to visitor pressure
- Damage to archaeology & geology south of Bradgate House due to visitor pressure
- Areas of bracken across the area
- Location/siting of litter bins
CHARACTER AREA 6: LITTLE MATLOCK

This Character Area forms the Picturesque slope to the north of the entry drive from Newtown Linford in the west, characterised by a mix of veteran native and exotic trees planted during the 19th century in line with the fashions of the day and quite different from elsewhere in the park.
Archaeology

5.97 This area contains medieval ridge and furrow earthworks at the western end. Two banks of a possible rectangular enclosure have been identified but are not verified.

Geology

5.98 This area contains one of the park’s key geological assets: ‘Little Matlock’ Gorge SK525 101. Description is an unusual gorge, which may have been caused by the discordant drainage of the River Lin cutting through the igneous South Charnwood Diorite. In addition the area includes the Geological Conservation Review (GCR) site 2348 Bradgate Park (Quaternary of Midlands – Avon). This geomorphological feature provides the template for the Character Area’s landscape and will have influenced the location of the Upper Palaeolithic site.

5.99 The site is also useful for showing intrusive relationships and the mineralogy of the diorite. The ‘Wishing Stone’ nearby is a large, independent block of diorite.

Trees & Woodland

5.100 There are 126 veteran trees recorded within the area and 15 historic trees. All of the veterans recorded are oaks, 2 of which are classified as ancient, estimated at over 550 years old. The historic trees include a mix of Cedar of Lebanon (6), Monkey puzzle (4), Blue atlas cedar (2), and a larch and red oak, some at least of which are likely to represent the planting undertaken by the 7th Earl of Stamford during the mid-19th century. These exotic plantings lend the area a designed, picturesque quality quite different from the rest of the park, and are significant in reflecting a considered 19th century design intervention by the park’s owner that appears to have been restricted to this part of the park.

5.101 Of the trees within this area, 28 (all veteran oaks) have been identified as requirement further management, including crown reduction works and pollarding of adjacent trees. Two of the veteran oaks have been identified as being in need of a tree risk assessment (1143 & 1178).

Ecology

5.102 This relatively small character area supports ancient parkland habitat of high ecological interest with mosaics of dense bracken and species poor semi-natural grassland, and a high density of veteran oaks. A south-facing linear rocky outcrop with fine veteran trees is present along the north of the main east-west access track.

5.103 The majority of the grassland is typical of the Park as a whole, being dominated by a mix of common bent and red fescue, with some sheep’s sorrel, lesser stitchwort Stellaria graminea and wavy bitter-cress Cardamine flexuosa. Locally prominent anthills add to the grassland’s structural and floristic interest.
5.104 The western edge supports an indistinct small network of dry drainage grips, together with occasional damp grassland species such as purple moor-grass and soft rush. Mat-grass is conspicuous along the edges of footpaths.

**Current Character & Use**

5.105 Little Matlock forms part of an exceptional picturesque composition characterised by veteran oak trees fused to the steep slopes and rock outcrops, and exotic evergreen trees planted during the 19th century in line with the fashions of the day. Its height and rugged appearance make it a popular viewpoint and its qualities are immediately apparent upon entering the park from the Newtown Linford direction. Views down to the serpentine form of the silt ponds and River Lin below and over to the Deer Sanctuary are spectacular.

5.106 The combination of the high quality experience to be gained and its proximity to the main entrance and footpath results in heavy footfall within this area and erosion is readily apparent, particularly where desire lines have been established in vertical lines up the slope.

![String of silt ponds along the River Lyn](image)

*The string of silt ponds along the River Lyn weaves through the valley defining the southern boundary of the area. The combination of veteran trees, Victorian exotics and sheer drops from rocky outcrops creates a distinctly picturesque experience.*

5.107 A timber post and rail fence installed to act as a barrier to a steep bank to one of the silt ponds detracts from the visual quality of the area.
Desire lines running down steep slopes are resulting in erosion (left) and a timber post and rail fence (right) is a visually intrusive element

**Key Significance**
- The picturesque landscape composition
- Veteran and 19th century exotic trees
- Spectacular views
- 18th century stone wall
- Key geological asset: ‘Little Matlock’ Gorge

**Key Issues**
- Erosion through heavy footfall
- Visually intrusive timber post and rail fence
- On-going inspection and management of veteran trees in a heavily trafficked area
5.108 This Character Area follows the line of the River Lyn, which defines its boundary in the south and with the tarmac drive defining the area’s northern boundary. The area is open to the public, and visitors make extensive use of the river and bank during warm weather. The area includes the 19th century silt ponds and cascades in the west, the estate yard in the centre and a publicly accessible area of park in the east between the Deer Sanctuary and Deer Meadow.
Archaeology & buildings
5.109 This area contains the Pheasantry (now the site of the estate yard), the Stables to the south of the house. The medieval park pale crosses it.
5.110 The western course of the Lyn was damned to provide water to the Tudor mansion via the leat through Newtown Lawns, before the creation of the silt ponds and cascades in the 1860s coinciding with the creation of the Cropston Reservoir. These functional features would have served to heighten the picturesque qualities of this part of the valley, although unsympathetic 20th century repair work has denuded their historic appeal.
5.111 The alluvial nature of this area will have resulted in the preservation of archaeological and environmental material within flood silt deposits from all periods.

Geology
5.112 The character area includes GCR site 2348 Bradgate Park (Quaternary of Midlands – Avon). This is a geomorphological feature, which provides the template for the Character Area’s landscape.

Trees & Woodland
5.113 There are 17 trees within the area recorded as veterans, 15 oaks (3 of which are veterans) and three alders, and 40 historic trees. There are no management recommendations for any of the trees within this area.

Ecology
5.114 The River Lin forms a largely engineered channel with a series of silty pools and runs over a rocky bottom and with vertical stone bank support in some sections. The River lacks conspicuous aquatic macrophytes with marginal aquatic habitats largely restricted to damp margins of rushes. The margins of the channel are deer poached in some locations.

Current Character & Use
5.115 The combination of ponds, cascades and the shallow and accessible riverbed makes this is another attractive and popular area of the park and extensive use of the river and bank is made by visitors during warm weather. The silt ponds have been carefully designed to fit into their surroundings and some fine details including large overhanging weir stones that result in maximum visual and aural interest. However, the tops of the stone wing walls to the weirs have been capped with concrete, which detracts from the appearance of these historic features. In addition, the stone edging to the engineered channels is in a poor condition and much of it has found its way in to the river itself. High levels of use have resulted in erosion in riverside locations where it is easier for visitors to get close to the waters edge. The tarmac road is the main thoroughfare through the park and high levels of use have resulted in the grass verges on either side becoming eroded.
5.116 The exterior walls of the former pheasantry now serve very effectively as a well-located and ‘hidden’ maintenance yard.
Heavy footfall in accessible waterside locations is resulting in erosion. Poor quality concrete repairs (right) detract from the quality of the 19\textsuperscript{th} century silt pond design.

### Key Significance

- 19\textsuperscript{th} century silt ponds
- Accessible river valley
- The pheasantry site which is now used as a maintenance yard
- Remnant park pale and potential for further archaeological survival
- Collection of veteran and historic trees

### Key Issues

- Poor quality repairs to the 19\textsuperscript{th} century silt ponds
- High levels of erosion to areas surrounding the river/silt ponds and to the grass verges adjacent to the road
This Character Area comprises one of the finest examples of woodland pasture within Bradgate Park with many ancient pollards ornamenting the steep, rocky ground, which, without the general presence of the public in this deer ‘sanctuary’, perpetuates the character of a medieval deer park. The areas also contain elements of the seventeenth century layout with the upgraded Anstey drive and surviving avenue trees, granite bridge and traces of the gatehouse in addition to earlier ridge and furrow.
Archaeology

5.118 The southern seventeenth century approach to the house crosses the Deer Sanctuary (MLE18596). Few avenue trees survive although side ditches are visible. An area of suspected gatehouse is visible in the north of the area. Part of the Medieval Pale can be traced in this area, and is well preserved in places. An unknown enclosure of irregular shape 150m by 55m with entrance in the south has been identified running between Holly Plantation and Thorn Spinney. The ditch of this feature clearly survives as an earthwork: the broad form would be consistent with a Bronze or Iron Age fort and if this were the case this would be of high significance. Nine further possible ditches have been identified in the LiDAR data in this area of which 6 have been identified on the ground. These features are undated and are of unknown significance.

5.119 This area contains medieval ridge and furrow earthworks at the western end. The bank of another possible enclosure some 80m across has been identified 100m north of the park’s southern boundary.

Geology

5.120 This area contains one of the park’s key geological assets, being the Triassic desert sediments in the small cliff section of the River Lin SK532 098, which actually falls within the Deer Sanctuary Character Area as it forms the river’s southern boundary bank. The site is useful for demonstrating the concept of a buried Permo-Triassic topography.

5.121 The character area also includes GCR site 2348 Bradgate Park (Quaternary of Midlands – Avon) and GCR site 1061 Bradgate Park (Precambrian of England and Wales) illustrating the complex and important geology in the locality.

Trees & Woodland

5.122 This character area contains by far the greatest collection of trees within the park, with 265 trees classed as veterans, predominantly oak with some sweet chestnut and a Cedar of Lebanon. Two of these oaks are also recorded as ancient trees (2608 & 2914), estimated at over 500 years old. There are 27 historic trees, largely Cedar of Lebanon with 6 Monkey Puzzles and a Larch which reflects the picturesque additions to the landscape c. 1830 on. While these trees are obviously at odds with the dominant wood pasture character of the area, they hold a legitimate significance in evidencing later landscape ‘improvements’, contributing to the character to the west of the area over looking the River Lyn, being similar in character to Little Matlock which defines the designed valley landscape of this western approach.

5.123 Management works have been recommended for 27 trees within the area, predominantly on veteran oaks and including crown and tree height reduction.
A large concentration of veteran oaks defines the character of much of this area

Exotic trees area characteristic in the west

One of the area’s distinctive ancient oaks

5.124 The area contains two circular even-aged oak *Quercus robur* plantations, namely Holly Plantation and Thorn Spinney. The oak trees within the former appear to be slightly older, while the later supports occasional larch *Larix europaea* and a few mature hawthorn *Crataegus monogyna* around its perimeter wall. Both woodlands lack an understorey shrub component, and the sparse and patchy deer-browsed ground layer comprises a species-poor mix of bracken *Pteridium aquilinum*, Yorkshire-fog/creeping soft grass, rough meadow-grass *Poa trivialis*, common bent, soft-rush *Juncus effusus*, nettle *Urtica dioica*, lesser celandine *Ranunculus ficaria*, chickweed *Stellaria media* and a few small patches of bluebell *Hyacinthoides non-scripta*.

Ecology

5.125 The Deer Sanctuary comprises an exceptional example of ancient parkland habitat, with a high density of veteran trees, mainly oak, with mosaics of tall dense unmanaged bracken, and more open and shorter managed bracken in association with species poor semi-natural grassland. The majority of the bracken management has taken place on the middle and upper slopes, with dense swathes of unmanaged bracken still present along the River channel, all of which contribute to a real risk of fire and loss of or damage to veteran trees.

5.126 The majority of the grassland is of semi-improved character, and is uniformly short and relatively species-poor. The most common species throughout are common bent, Yorkshire-fog/creeping soft grass and crested dog’s-tail, and are typical of neutral to slightly acid conditions. Some areas show signs of greater improvement with abundant perennial rye-grass, while damper areas are characterised by frequent tussocks of soft-rush.
5.127 Patches of the U1 NVC acid grassland type community are present locally, mostly on hilltops, on thin soils associated with rocky outcrops and former quarries. Common species include red fescue *Festuca rubra*, sheep’s fescue *F. ovina*, mouse-ear-hawkweed *Pilosella officinarum*, sheep’s sorrel *Rumex acetosella* and heath wood-rush *Luzula multiflora*, with species typical of thin soils and bare ground including early hair-grass *Aira praecox*, common dog-violet *Viola riviniana*, sticky groundsel *Senecio viscosus*, and the mosses *Hypnum jutlandicum*, *Polytrichum juniperinum* and *P. piliferum*. The locally uncommon species upright chickweed *Moenchia erecta* is also known to occur in association with this habitat type.

5.128 Whilst nectar sources in regard of trees are relatively limited within the character area hawthorn does occur both as historic trees (1730) and recent self-sets.

**Current Character & Use**

5.129 The Deer Sanctuary is a heavily treed area of parkland that is quite distinct from the more open aspect of the rest of the park. The majority of the area is out of bounds to members of the public as it acts as a deer sanctuary, although two public rights of way enter from the east. The ground rises up to an elevated plateau to the southern edge from which impressive views of the park and reservoir can be gained. The houses that line the Bradgate road just beyond the southern park boundary are the only modern development that affects the immediate setting of the park.

5.130 The broad and flatter area to the east remains publicly accessible and provides a quieter area for relaxation; views to the north of Bradgate House ruins are impressive, although intrusive 20th century conifer planting to the east (larch plantation being part of Bradgate Park Estate and the Scots Pine belonging to Severn Trent) strike a discordant note.

5.131 The high density of gnarled veteran trees, the later layer of 19th century conifers, most notably the mature monkey puzzles, and the rock outcrops combine to define this area’s character, which has much in common with Little Matlock on the opposite side of the Lin Valley. The two spinneys on higher ground to the east are enclosed by good condition stone walls, but the single species oak plantations lack the diversity found in some of those found to the north.

**Key Significance**

- Exceptional example of ancient parkland habitat including the highest concentration of veteran trees within the park
- Historic Picturesque character of planting in the west similar to Little Matlock
- Patches of acid grassland
- Views to the north park
- One of the park’s key geological assets overlooking the Lin
- Medieval and other archaeology
- Refuge for deer

**Key Issues**

- Large expanses of bracken
- Intrusive 20th century conifer trees in the east
- Condition of veteran trees
CHARACTER AREA 9: DEER MEADOW

5.132 This Character Area encompasses an historic water meadow in the south-east corner of the park, being a flat, open area of grass now used as a deer sanctuary and off-limits to the general public.
**Archaeology**

5.133 This is an area of Water Meadow (MLE18601) of Medium to High Significance (on the basis of the rarity of water meadow survival, although more assessment is required to fully understand how much of the feature survives and how it worked. The eastern avenue of trees the marked one of the approaches to the house crosses the northeast of the area (MLE18595).

**Trees & Woodland**

5.134 There are three veteran trees within this area, two oaks and an alder, as well as an historic alder. The alders are located along the river bordering the south of the area, with a small collection of oaks in the northeast corner. The area is otherwise devoid of planting.

**Ecology**

5.135 This character area consists of a single field of semi-improved neutral grassland with a uniform and short sward that is maintained by continuous deer grazing, although there are some indicative signs of past improvement.

5.136 The grassland is dominated by perennial rye-grass *Lolium perenne* and crested dog’s-tail *Cynosurus cristatus*, together with a range of other common grasses and a wide range of forbs including common bent *Agrostis capillaris*, Yorkshire-fog *Holcus lanatus*, field woodrush *Luzula campestris*, white clover *Trifolium repens*, common ragwort *Senecio jacobaea*, spear thistle *Cirsium vulgare* and dandelion *Taraxacum agg.*

5.137 A rush-filled shallow flowing drain with a vertical stonewall along its eastern side is present along the western boundary of the field.

**Current Character & Use**

5.138 This area, which is out of bounds to visitors, is dominated by closely grazed grassland. Its historic use as a former water meadow remains visible through extant walls, ditches and sluice points, all of which are well maintained.

**Key Significance**
- Historic water meadow

**Key Issues**
- Potential management and use
CHARACTER AREA 10: HALLGATES

5.139 This Character Area covers the north-east corner of the park, being a relatively open, westerly-sloping part of the park with the edge of Coppice Plantation defining the boundary in the west and the park’s eastern boundary (along the Cropston Reservoir) in the east. The main tarmac drive runs through the area from the car park in the northeast leading into the Low Park area and Deer Barn in the southwest.
Archaeology

5.140 Finds of Roman pottery and a coin have been made in this area. As isolated finds they are of low significance but evidence activity in the local area.

5.141 Areas of ridge and furrow cultivation can be traced in the north of the area, and these are bounded in the south by the line of the medieval pale (FL00592). There may be two phases of Pale apparent on the eastern edge, with the lines diverging just to the east of the modern track with one line turning abruptly to the south.

5.142 Traces of a possible earthwork bank have been identified below the ridge and furrow (FL00572). Traces of a curving bank and ditch have been identified within the Coppice Plantation, which may be part of, or predate the medieval field system part of which lies to the east.

Trees & Woodland

5.143 There are no veteran or historic trees recorded within this open character area.

Ecology

5.144 Hallgates supports mosaics of species poor semi-improved grassland and managed bracken, with occasional parkland trees and a single woodland block. It lacks significant areas of dense unmanaged bracken.

5.145 The grassland forms a relatively uniform sward of species poor semi-improved acid grassland of common bent, Yorkshire-fog/creeping soft grass, red fescue, with occasional anthills.

Current Character & Use

5.146 Hallgates is an area of open parkland set on a gentle east facing slope that falls down to Cropston Reservoir. A number of late 20th century plantations occur within this area; silver birch blocks are situated adjacent to the boundary with the reservoir and a larger rectangular block of oak to the north of the drive.

5.147 A large rocky outcrop and former quarry provide a popular location for climbing and BMX/mountain biking activity, which has caused erosion.

The rocky outcrop within Hallgates unfortunately a popular place for scrambling and off road cycling, even though prohibited by the Bradgate Trust.
<table>
<thead>
<tr>
<th>Key Significance</th>
<th>Key Issues</th>
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<tbody>
<tr>
<td>• Historic driveway and entrance</td>
<td>• Erosion of rocky outcrop and former quarry by mountain biking</td>
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<tr>
<td>• 19th century spinney</td>
<td>• Late 20th century planting requires management and interpretation to promote ecological benefits</td>
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6. **Statement of Significance**

6.1 The significance of Bradgate Park is expressed in summary before being considered further in regard of English Heritage’s *Conservation Principles*.

**Summary Significance**

6.2 The significance of Bradgate Park is based in its extraordinary geological and topographical character, the craggy landscape of exposed ancient rock creating a pseudo upland ecosystem in the English midlands. This physical landscape dictated how the land could be used and its agricultural limitations encouraged the early formation of a deer park, enclosed from the wastes of Charnwood Forest, as part of Groby Manor, a use that has continued to the present day. Following the transfer of the estate by marriage to the Greys, Bradgate became forever associated with the vain ambition of the family; their political ascent cumulating in the disaster of Lady Jane Grey’s nine day reign as Queen of England and, later, tainted by association with regicide. Bradgate was literally boarded up by the family in the 1730s when marriage and fortune made Dunham Massey, Cheshire and Enville, Staffordshire their prime seats. The park enjoyed a brief Renaissance in the nineteenth century as a gentleman’s sporting estate before being sold in 1924 to a local benefactor who gave the park to the city and county of Leicester.

6.3 The key significances of Bradgate Park are:

- Its unique geology with some of the oldest rocks & fossils in England (SSSI, GCR & candidate RIGS/LGS designated);
- The rich palimpsest of inter-related and overlapping earthworks and possibly associated field systems remains testifying a land-use history that dates to the Bronze Age, with evident exploitation to the last major glacial episode. These include very recently recognised sites which are very rare and may have high significance;
- Its outstanding collection of veteran and ancient trees, providing an invaluable ecological resource in combination with other localised habitats (SSSI designated);
- Its long, uninterrupted continuity of use as a deer park since the early medieval era, evidenced through the archaeological record and the ancient tree population and perpetuated through its traditionally managed parkland deer herds (Grade II Registered Park & Garden);
- The Late Upper Palaeolithic Site of international importance as a very rare discovery of an open air Creswellian flint-working site. The full extent of surviving Late Upper Palaeolithic evidence is not known, and it should not be considered in isolation. Other parts of the park including rocky outcrops and river edge areas protected by deposits of alluvial sediment should be considered to have potential for the preservation of deposits from this period also;
- The ruins of Bradgate House and its surrounding gardens and outbuildings, providing an evocative reflection of its former Tudor glory (Scheduled Monument & Listed Building);
- The historical associations with Lady Jane Grey, born at Bradgate House and Queen of England for nine days before her execution;
- The recreational, educational and inspirational resource provided in perpetuity for the people of Leicestershire and beyond by benefactor Charles Bennion.

**Significance in regard of English Heritage’s ‘Conservation Principles’**

**Evidential**

6.4 Bradgate Park offers a unique geological record with some of the oldest rocks in England being exposed within the park. Precambrian rocks, dating to 543 – 580 million years, contain evidence of multi-celled,
soft-bodied animals, *Ediacaran* fauna; significance illustrated by the park’s SSSI and RIGS/LGS designations.

6.5 The incredibly rich collection of veteran trees within a parkland context provide a highly significant ecological resource, particularly for invertebrates, further reflected in the park’s SSSI designation, which describes Bradgate as “one of the finest remaining examples of ancient parkland in Leicestershire...[and] contains some of the last remaining fragments of wet heathland in the County”. The nature conservation interest of the park is complemented by rich saxicolous lichen communities on the rocky outcrops and associated dry acidic grassland with patches of bilberry *Vaccinium myrtillus*, as well as patches of marshy ground to the northeast dominated by purple moor-grass *Molinia caerulea* with a number of locally rare plants. The park also provides important habitat for a good variety of breeding birds as well as reptiles and amphibians.

6.6 The historic emparking of the area and the consequence of extremely limited cultivation of much of the area has resulted in a landscape which retains a rich archaeological earthwork record evidencing earlier park and pre-park uses.

6.7 The most important site within the study area is the Late Upper Palaeolithic Site to the west of Newtown Lawns, which has been confirmed through recent survey to be of international importance as a very rare discovery of an open air Creswellian flint-working site. This site, identified through chance discovery, is associated with the Little Matlock Gorge, the topography of which was attractive to hunters.

6.8 Within extensive earthworks revealed across the park are newly identified banked and ditched enclosures, and possible terrace field systems, from later prehistoric periods. It is not possible to date these features without further investigation, but should they be of prehistoric date they would be of a high significance due to their rarity. Other earthworks that have a clearer medieval character are stretches of the medieval park pale and the Scheduled moated house site (which is by definition of national significance). Evidence of possible medieval occupation to the east of the house ruins is a significant discovery in the interpretation of development in this period. Later adaptation and use of the park through the Tudor era and beyond is also reflected in the archaeological record, with features including the possible sites of outbuildings and structures relating to the Tudor park and features relating to the estate’s later 18th and 19th century use for sporting endeavors, including the 18th century racetrack and the former stables below Old John. Taken as a whole, the archaeology evidencing the development of the medieval and later phases of the park may be considered to be of national significance for their collective value and warrants further consideration by way of heritage designation.

6.9 The park also contains the distinctive remains of Bradgate House, built in brick as an early example of a non-defensive house c. 1500 by the 1st Marquess of Dorset. The house was abandoned in 1739 and gradually reduced to the romantic ruin, which remains today. The site of the house and immediate garden is a Scheduled Monument, whilst the park as a whole is included at grade II on English Heritage’s Register of Parks and Gardens of Special Historic Interest, making them both of national importance. The archaeology of the gardens and immediate park remains legible with associated features such as fishponds also surviving, and the interest of these remains in reflecting an abandoned Tudor garden is such that it likely warrants extension of the Schedule designation to cover its entirety.

6.10 Later adaptation of the park into a nineteenth century sporting estate – for pheasant and fox – is also evidenced by the surviving stone-walled coverts and use of exotic evergreens, whilst the trees within and without reflect the park’s continuation of ‘woodmanship’ in the freakish pollards of the 1500s to the straight timber of the coverts, which include elements of c. 1960 forestry planting. Old John Tower to the north, marking the site of a previous windmill within the park, and the adjacent Yeomanry War Memorial are both Grade II Listed buildings and of national significance. The park retains its two deer herds, one Red, one Fallow, the last surviving true deer park in Charnwood Forest and highly significant as claiming a continued presence of deer within the park since its medieval inception.

6.11 A significant 20th century archaeological layer appears to have been uncovered through recent survey which supported by some photographic evidence has identified areas of possible WWII activity that has left its own archaeological signature which has consequently clouded some of the understanding of previous phases. These features are nevertheless of local significance, or possible regional collective significance in reflecting concerted wartime use.
**Historical**

6.12 Bradgate Park was the principal seat of the Grey family who rose to prominence in the late medieval period becoming ever closer to the throne. A claim via Elizabeth Woodville, Queen of Edward IV, encouraged the 3rd Marquess and 1st Duke of Suffolk, Henry Grey, to pursue the crown in favour of his eldest child, Jane, in 1554. Her nine-day reign resulted in execution of father and daughter. The family returned to favour under the early Stuarts, Henry Grey taking the title 1st Baron Stamford following his advantageous marriage into the still powerful Cecil family. However, his son, Thomas, brought the family honour back into question as a signatory to the death warrant of Charles I and later distrust by Cromwell. The 2nd Earl managed to restore some favour, whilst balancing growing debt with political gamble as a confirmed Whig, before being stripped of public office by Queen Anne in the early eighteenth century, which marked the end of the family’s representation in high office. Thereafter the family remained country Whigs, then Tories, able to enjoy their vast estates and fluxing fortunes. The title, Earl of Stamford, died out in 1976 on the death of the 10th Earl.

6.13 The family’s close association with the Crown is of the highest significance.

6.14 In 1924 a descendant of the family sold Bradgate Park to Charles Bennion. Bennion was amongst the leading manufacturers of the Boot and Shoe Industry in East Midlands and his company – The British United Shoe Machinery Company – enabled him to gift Bradgate in 1928 to the city and county of Leicester ‘to be preserved in its natural state for the quiet enjoyment of the people of Leicestershire’.

**Aesthetic**

6.15 Bradgate is significant for its wild upland scenery located in rural middle England. The often-stark topography coupled with the grazing deer and walled woodlands creates a sense of the moorlands of Scotland and northern England – indeed, the wildlife that inhabits the park is often the same. Legend has it that Lady Jane Grey was present when the last grey wolf was killed in Charnwood at Bradgate. The twisted and stunted trees are particularly significant characterizing the darker associations of the park and being a favoured subject for artists from c. 1800 on.

6.16 While Bradgate was undoubtedly a gentleman’s residence in c. 1550, indeed the home of a Duke, and its highly unusual non-defensive brick house, formal walled gardens, water meadows and park laid out accordingly, by the mid-seventeenth century it was neither satisfactory in extent or form for the 2nd Earl of Stamford who spent lavishly laying out a grand, formal landscape around his equally grand Cheshire home of Dunham Massey, or for the 4th Earl who commissioned Sanderson Miller, William Shenton and later, Humphry Repton, to improve his favoured seat at Enville Hall, Staffordshire. It was the 4th Earl who literally abandoned Bradgate ordering the windows and doors to be bricked up. Bradgate was never ‘improved’.

6.17 The 6th and 7th Earl’s recognized the sporting potential of Bradgate, the semi-wild landscape lending itself to fox hunting and shoots – the stone ringed coverts of that time becoming an essential part of the landscape.

**Communal**

6.18 Although a private estate, Bradgate Park contributed public benefit from the mid 1700s either in the form of charcoal (this including timber from the wider Stamford estate) for the new furnaces of Derby, or by 1800 through a monopoly on rabbit meat in the Leicester market, following the close of warrening within Charnwood Forest – Bradgate rabbit rose from 6d to 1s 8d a couple!

6.19 In 1871, 180 acres in the northwest area of the park was lost to the new Cropston Reservoir, built to provide Leicester with clean drinking water. The lake now forms part of the Bradgate Park and Cropston Reservoir SSSI.

6.20 By 1881 the people of Leicester were allowed periodic access to the park for recreation walking the five miles there and back in a day. This appreciation of green space was finally realised in 1924/28 following the purchase and gift of the park to the city and county of Leicester by local businessman, Charles Bennion. Bradgate Park became a Country Park in 1970, and today provides a recreational resource of regional significance.
7. **Key Management Issues and Vulnerabilities**

7.1 This chapter draws on detailed analysis highlighted through the various surveys completed as part of the parkland management planning process and provides a summary of key management issues and vulnerabilities facing the park as a whole in order to inform the development of appropriate management policies and actions.

**The Country Park as visitor attraction**

7.2 Bradgate Park attracts an enormous annual footfall of c. 500,000, which reflects its importance as a public green space in a rapidly developing part of the East Midlands. The presence of visitors through walking, cycling and riding in the park, coupled with the growing pressure on infrastructure – car park, visitor centre and café, toilets and metaled tracks – all contribute to increased pressure on the landscape which is most evident in an increased threat of damage to the natural and historic environment. Issues of greatest concern include:

- Path and path side erosion throughout the park and increased erosion and wear of Low Park/Deer Meadow in the vicinity of the visitor centre, particularly around picnic benches and signboards
- Increased wear of bridle-paths and designated cycle routes through additional wear and use of mountain bikes
- Issues of policing prohibited activities such as cycling off designated paths
- Disturbance to wildlife – specifically deer, reptiles and ground nesting birds – through increased presence of dogs and general increase in visitor pressure
- Increased need for infrastructure within the park including additional visitor facilities and metaled tracks (To discuss: DDA and progress update on improvements identified in the BT Management Plan)
- The increased visitor numbers result in a need for additional care of the scheduled monument through on-going conservation and stabilisation work, and the negotiated use of ground within the garden enclosure as event space
- The security of the internationally significant geological and fossil resource is an on going consideration for the management of the park. In part, this has been addressed by the carefully managed access to the most vulnerable elements and by clear instruction to visitors not to damage or remove material from site
- The conservation and interpretation of the Upper Palaeolithic site requires management in terms of the preservation in situ and /or investigation and recording. In addition, erosion was noted at Enclosure FL0446/7 (details in Walkover survey report). This work also provides an opportunity for a new site-wide approach to the archaeological resources of the park as a visitor attraction

**Drainage**

7.3 Bradgate Park’s noted wet grassland/remnant heath wet heath habitats are declining in condition predominantly as a result of historic and more recent drainage. Recent reports on the hydrology and deer management have recommended restoration of these areas as they are good for biodiversity and provide wallowing sites for deer. Indeed, recent work undertaken by the Trust since the most recent SSSI assessment – by incorporating drainage grips into the wet habitat areas – has helped improve the condition of this habitat by raising the water table.

7.4 The compaction of ground in the vicinity of the visitor centre is contributing to water logging in this area, whilst also potentially increasing the parasite burden acknowledged in this area. The impervious soils (Keuper Marl and Boulder Clay) found in this area exacerbate impact from footfall and vehicle movements.
Deer

7.5 The Bradgate Deer herds are acknowledged to be in good health with a population in balance with the capacity of the landscape. Seasonal culling is still required to maintain this balance and optimal animal health.

7.6 The deer do, however, contribute to the erosion of the park landscape by using the same tracks as visitors and congregating near the visitor centre. It is also evident that deer are causing erosion within the house site by seeking shelter near the walls and using established ‘track’ ways across the area.

7.7 The presence of deer creates a potential health and safety risk to visitors not only during the particularly sensitive times of the rut and calving but also in the presence of deer ticks (Lyme disease) and liver fluke.

Trees

Acute Oak Decline

7.8 The recent tree survey carried out as part of this Plan has identified a possible outbreak of Acute Oak Decline within the oak population of Bradgate Park. A group of trees near Thorn Spinney is particularly affected. This increasing threat to British woodland is caused by a bacterial infection understood to be carried by the oak jewel beetle *Agrilis biguttatus.* Exit holes of the beetle were noted on tree bark during the survey. The infection shows itself through rapidly developing symptoms, which include the seeping of a dark sticky fluid from cracks in the bark and the gradual thinning of the canopy; tree mortality can be expected within 4 – 5 years. Monitoring of infected trees is advised in accordance with the Forestry Commission Practice Note 15 – Managing Acute Oak Decline. The emphasis is on containment and observation; highly significant considerations given the aged tree population of Bradgate Park.

Horse Chestnut Decline

7.9 The second major plant health issue at Bradgate Park is the occurrence of bleeding cankers indicative of *Pseudomonas syringae* which progressively kills the tree, although some trees appear to make a partial recovery. The effect of this infection is augmented by the presence of *Cameria ohridella,* a leaf-mining moth, whose lava undermines the health of the tree by damaging leaves reducing their ability to photosynthesize. In addition the common fungal disease, Guignardia leaf blotch, is also present at Bradgate, which also affects the condition of the leaves.

7.10 Unfortunately there is as yet no proven treatment for either the *Cameria* or leaf blotch; the future of Horse Chestnuts within, specifically, southern England remains in doubt.

Shading by new tree planting

7.11 Many of the older trees within Bradgate Park have through senescence reduced in mass, rendering them smaller than many younger trees. There is therefore a risk of shading out the older trees and the tree density needs to be adjusted accordingly with targeted removal of younger trees or haloing around the older ones and, where replanting is undertaken, not planting within at least 15m of the older tree.

Pollarding

7.12 346 of the veteran trees recorded at Bradgate are pollards, relics of an ancient woodcraft practice. However, pollards were cut on rotation and many at Bradgate have been neglected for at least 100 years, the subsequent growth now risking their structural integrity. While it is possible to pollard an older tree, consideration of its overall age and health against the sudden shock of limb loss needs to be carefully considered at the risk of actually killing the tree. Successful pollarding has taken place on some of the older trees, but management in general of the older trees in the park may need a longer term approach of ‘managing down’ as practiced elsewhere at locations such as Hatfield Forest.

7.13 Where trees are subject to work on the grounds of public safety, should the tree be of particular significance it may be more appropriate, for example, to control public access to it by either fencing it off or by diverting footpaths away from it rather than to expose it to potential loss.
**Deadwood Management**

7.14 Bradgate Park represents an important resource for deadwood habitat, which needs to be continued. Ideally, wood should be allowed to decay naturally where it falls, even within a designed landscape. However, this approach can compromise the aesthetics of a designed landscape and pose a potential risk to livestock and visitors and, therefore, a balance needs to be struck between the different requirements. At present Bradgate Park does not have a deadwood policy and it appears that this issue is addressed on an ad hoc basis. The local clearance of fallen wood to approved areas (usually within the drip line of the original tree) could be encouraged and the stabilization of standing deadwood in public areas be better managed by using techniques including corona cutting or monolithing. It is understood that the park sells firewood – this should be supplied from a sustainably managed woodland and perhaps not include deadwood from the park itself.

**Fire Risk Management**

7.15 Fire damage has been noted on sixteen veteran trees. While it is not unusual for lightning to fire old hollow trees, this damage appears more likely to be deliberate. It is therefore important that public information and the prohibition of barbecues etc. is clearly communicated at Bradgate Park and prioritized by the Rangers. The high percentage of bracken on site also poses a risk as it can fire easily in dry weather – a focus on removing bracken from around particularly notable trees to reduce risk is therefore encouraged as is the creation of fire breaks at interval across the park.

**Archaeology**

7.16 The main threat to archaeology within the park is from localised erosion, due to visitor pressures in areas of high footfall and from deer in other localised areas. The Late Upper Palaeolithic site is being severely degraded through visitor footfall; recent excavation aimed to establish an assessment of the character and condition of the monument so that an appropriate mitigation strategy could be developed. A number of earthworks features are also suffering from erosion, including stretches of medieval park pale and the leat through Newtown Lawns.

7.17 Recent archaeological work, which has combined the interpretation of LiDAR data evidence along with a walkover survey, has enabled the identification and interpretation of numerous possible new sites, and this has thrown an objective light upon the known archaeological record of the park, which can be used to validate all previous assumptions of the park’s development. This can include for example the phasing and development of the park pale, features which may be prehistoric or in fact relate to WWII activity, or the preserved circuit and boundary markers of the 18th Century racecourse. A number of discoveries have posed more questions than have been answered, highlighting gaps in our understanding of these features, such as earthworks around Old John which may be prehistoric (and thus of high significance), and the possibility of earlier medieval occupation around the Tudor house site.

7.18 Ultimately, further survey will be required to shed light upon the exact nature of these discoveries, opportunities for which may be provided through the University of Leicester’s planned programme of study in the coming years and the work of volunteer groups including the recently formed Groby Group and the current Charnwood Roots project. In the meantime, the unknown significance of these finds reflects a need for greater consideration of the early history of the pre-park and emparked landscape; the ongoing management of bracken will help to reveal more of this aspect of the park’s significance.
8. Management Vision & Actions

8.1 This chapter sets out the overall conservation strategy or vision in order to guide the management of Bradgate Park. The vision is supported by a series of management objectives, which address the full range of significances found within the park.

8.2 The chapter then provides a series of management actions to address geographically specific issues that affect the key significances of the estate as identified in earlier chapters of this plan.

Management vision

Bradgate Park will be managed to reflect its national importance as a medieval deer park with a multitude of interests, providing an invaluable free resource for the people of Leicestershire and beyond. The unique geology, with some of the oldest rocks and fossils in England, will be appropriately conserved for the benefit of future generations. The rich archaeological record, including the Late Upper Palaeolithic Site of international importance, will be conserved and interpreted and will be better understood through further survey. The deer herd at Bradgate Park will remain in perpetuity as a direct link to the Medieval past and as the only populated deer park surviving in Leicestershire. The outstanding collection of veteran and ancient trees will be conserved through appropriate management, providing an invaluable ecological resource whilst testifying to its ancient origins. Bracken will be systematically managed throughout the park to encourage a mosaic of wood pasture, grassland and heathland habitats rich in wildlife whilst enhancing landscape character and archaeological protection and understanding. The ruins of Bradgate House and its surrounding gardens and outbuildings will be appropriately conserved and interpreted, befitting their national significance and their historical associations with Lady Jane Grey. Access and interpretation will be enhanced throughout the park to enable the ongoing and improved enjoyment of visitors to this inspirational resource, which will be provided in perpetuity for the people of Leicestershire and beyond in accordance with the wishes of benefactor Charles Bennion.

8.3 The management objectives and site wide actions that support this vision include:

- To maintain and enhance the rich visitor offer at Bradgate Park whilst ensuring that the property’s historic fabric and spirit of place are conserved and enhanced.
  - Promote and enhance interpretation of features of interest throughout the park, including those away from the main visitor route.
  - Define and promote a series of circular walks that connect with features of interest and encourage visitors to explore less-visited areas of the park, helping to alleviate pressure upon the main routes.
  - Ensure that any new proposals and details such as visitor infrastructure and interpretation adhere to the vision for the park and help to conserve its historic character.

- To protect and interpret the wealth of above and below ground archaeology found across the park.
  - Active management of archaeological features (i.e. through scrub and bracken clearance) should be undertaken where required and as identified within the supporting actions and bracken management plan, including preservation by record of the Upper Palaeolithic site and further survey in the area to better conserve and understand this important resource.
  - Land management activity (farming/forestry/events) should ensure that no potentially damaging operations are carried out in areas of high archaeological sensitivity.
  - The archaeological resource should be presented sympathetically and fully interpreted to enable it to be appreciated and understood by the visiting public (e.g. the remains of Bradgate House Tudor garden).
  - Further archaeological survey should be undertaken in targeted locations to enhance our understanding of the resource.
o Any potential impacts to above and below ground archaeology should be reviewed at the planning stage of all management works.

• To conserve the outstanding collection of **veteran and ancient trees**.
  o Undertake arboricultural management works recommended within the tree survey according to the identified priorities.
  o Continue to monitor parkland trees for disease, signs of stress and damage from grazing animals, park visitors etc.
  o Do not create any new permanent vehicular access routes, gateways, ditches or underground utility routes within the root protection area of a veteran tree, and ensure vehicular use near trees is monitored and regulated to avoid compaction.
  o Consider the impact of events and promote appropriate awareness and knowledge of the sensitivity of veteran trees among managers and site workers.
  o Where feasible create or maintain firebreaks within bracken-dominated areas to protect the veteran trees at the site (discuss with Fire Brigade etc.) and prepare a map of where these are to be situated.
  o Develop a site-specific deadwood management policy.
  o Rationalise the previous planting of parkland trees under Countryside Stewardship (CSS) by replacing trees that have died. In addition, trees that were planted in inappropriate locations (or are an inappropriate species) should be replaced in a more appropriate location (or with an appropriate species) when the opportunity arises. Protect all newly planted parkland trees with appropriate tree guards.
  o Continue the recent practice of pollarding young parkland trees and the provision of new nectar sources.
  o Monitor signs of acute oak decline shown by trees at the site and take action as appropriate, whilst also making sure site managers are aware of any new tree pests or diseases.

• Enhance the **nature conservation values** of the estate.
  o Manage bracken throughout the park through a combination of rolling and targeted chemical control as identified in the detailed specifications below.
  o Restore and enhance the park’s degraded wet heathland habitats through targeted grip-blocking.
  o Prepare a planned programme of ecological monitoring to review impacts of management and refine approach where necessary.

• Conserve the park’s unique **geology**.
  o Implement the recommendations of the 2014 Geological Heritage Protection Works Feasibility Study.
  o Conserve the candidate RIGS identified within the park and maintain dialogue with the Leicestershire Historic and Natural Environment Geological Officer for updated information on their status and management advice.

• Continue sympathetic and traditional management of the park’s red and fallow **deer herd** in perpetuity as a direct link to the Medieval past and as the only continually populated deer park in Leicestershire.
  o To develop the Management Plan, 2011 (within the context of this present PMP) to inform the future management of the herd.
  o To retain a healthy population across all age ranges, carrying out pre-culls when necessary to produce animals above average carcass weight for sale, without a need for excessive
supplementary feeding (retain deer numbers within the consented limits agreed with Natural England).

- Consider deer as one of the tools to enhance biodiversity within the SSSI.

- To protect the immediate rural setting of Bradgate Park and its context within the Charnwood Forest.
  - In the immediate term, maintain a watching brief on any proposed developments which may affect the property’s setting (which extends beyond its visual setting), making reference to supporting guidance documents such as English Heritage’s *The Setting of Heritage Assets*, 2011.
  - Commission a setting study to provide a robust framework for assessing potential impacts upon the property in accordance with the *National Planning Policy Framework* (NPPF) and recognised professional guidance documents.

**MANAGEMENT ACTIONS**

<table>
<thead>
<tr>
<th>Management Actions Summary Table</th>
<th>Priority</th>
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<tr>
<td><strong>Visitor infrastructure &amp; experience</strong></td>
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<tr>
<td>1. Identify and promote circular ‘themed’ access routes that encourage visitor exploration of the wider park and help to alleviate pressures upon the main thoroughfare.</td>
<td>High</td>
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<tr>
<td>2. Develop and implement a cohesive programme of sympathetic interpretation throughout the park, tying in with newly identified access routes, using both physical interpretation (e.g. sympathetically sited &amp; designed interpretation panels) where appropriate and digital methods (e.g. online and interactive app software) to promote and explain the multiple significances found at Bradgate, including its history, archaeology, geology, trees, wildlife and numerous stories and associations.</td>
<td>High-Medium</td>
</tr>
<tr>
<td>3. Rationalise visitor infrastructure (e.g. litter bins, benches, signage) to ensure a sympathetic and cohesive design style and placement throughout, seeking opportunities to reduce visual impacts e.g. through removal/re-design of garish signage on otherwise sympathetic timber litter bins.</td>
<td>High-Medium</td>
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<tr>
<td>4. Monitor visitor impacts of erosion on the site, including issues of illegal mountain bike use to determine whether to maintain an outright ban or potential trial designated tracks.</td>
<td>Medium-Long</td>
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**Bracken Control**

5. Undertake a phased programme of mechanical and chemical bracken control in line with the targets of the HLS Bracken Management Plan (reducing the extent of unmanaged bracken to 60% cover or less by 2018 and to at least 35% cover by 2023). Figure 8.1 identifies priority areas to target in the initial as part of this overall reduction, defined both to conserve significant archaeological remains and enhance ecology). Refer to the Bracken Management prescriptions below and the separate HLS Bracken Management Plan for more detail. | High |

**Grip Blocking**

6. Continue remedial ditch blocking in Hallgates Valley together with initial trials of ditch blocking at the other two main wet heath locations in the north of the park within SSSI Unit 20 to re-wet areas of degraded wet heath, commencing with the production of a management plan to inform grip locations and specifications (see map & prescriptions below). | High |
<table>
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<tr>
<th><strong>Archeology</strong></th>
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<tr>
<td><strong>7.</strong> Phased archaeological assessment, with the aim of preservation by record of the Creswellian deposits, funded by HLS on the basis of significant and immediate need (see further guidance note below)</td>
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<td><strong>8.</strong> Broader archaeological (and geological) study, research, analysis and assessment of the Little Matlock landscape using a wide range of techniques, the aim of which being to set the known Creswellian site into context within Bradgate Park, but also within its national and international context</td>
</tr>
<tr>
<td><strong>9.</strong> Conserve other areas of high or potentially high archaeological significance through bracken control in the initial instance (see 5 above), with subsequent excavation to enhance understanding. Priorities as follows (refer to Figure 8.1): prehistoric earthworks &amp; remains (a, b &amp; e), park pale overlay (d), possible medieval earthworks (e) &amp; undated ditch system in Hallgates (f).</td>
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<tr>
<td><strong>10.</strong> Monitor condition of Tudor garden remains for impacts from deer and events and undertake geophysical survey of targeted areas to further understand this important resource. Maintain the sunken parterre walls through sympathetic mortar repairs.</td>
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<tr>
<td><strong>11.</strong> Monitor condition of other areas of archaeology currently suffering from erosion, including medieval leat, and archaeology throughout the park to ensure no operations are adversely or potentially impacting upon it (e.g. bracken rolling). Bi-annual photographic record as a minimum of key affected sites, with review after 2 years to discuss ongoing impacts particularly following removal of bracken. Stick to existing tracks, record new damage.</td>
</tr>
<tr>
<td><strong>12.</strong> Provide sympathetic interpretation of significant archaeological features, including Tudor garden remains, Upper Paleolithic site, racecourse, and future discoveries made through excavation of prehistoric and medieval earthworks, to promote understanding of Bradgate’s rich archaeological resource to visitors.</td>
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<th><strong>Geology</strong></th>
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<tr>
<td><strong>13.</strong> Pursue completion of the 2014 Geological Heritage Protection Works Feasibility Study and implement its recommendations for the preservation of the Memorial Crags.</td>
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<tr>
<td><strong>14.</strong> Monitor the condition of the 14 candidate RIGS, ensuring no detrimental impacts from bracken/scrub growth or visitor/deer damage, and liaise with the Leicestershire Geological Officer for guidance on best practice and ongoing management.</td>
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<th><strong>Trees &amp; Woodland</strong></th>
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<td><strong>15.</strong> Monitor signs of acute oak decline and undertake identified measures to minimise the risk of spreading the disease (see prescriptions below).</td>
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<td><strong>16.</strong> Undertake tree surgery or further inspection to the 78 trees identified in the Tree Survey Report (Appendix 1) using an arborist who is appropriately qualified and experienced in the management of veteran and ancient trees where appropriate and otherwise sufficiently qualified in-house staff, maintaining records of management works carried out on each tree.</td>
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<tr>
<td><strong>17.</strong> Continue to monitor stocking densities of deer to ensure parkland trees for disease signs of stress and damage from grazing animals, park visitors, etc.</td>
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<tr>
<td><strong>18.</strong> Create or maintain firebreaks where feasible within bracken-dominated areas to protect the veteran trees at the site (discuss with Fire Brigade etc.) and prepare a map of where these are to be situated.</td>
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</table>
19. Develop a site-specific deadwood management policy, with consideration for survey of invertebrate populations. | Medium

20. Undertake targeted new tree planting to rationalise the previous plantings by only replacing trees that have died. In addition, trees that were planted in inappropriate locations (or are an inappropriate species) should be replaced in a more appropriate location (or with an appropriate species) when the opportunity arises. | Medium-Long

21. Woodland management to be informed by separately produced Woodland Management Plan and compliance with WGS prescriptions. Where compatible with these in the long term, seek the phased harvesting of Coppice Plantation and replant with a mix of appropriate broadleaved species with some exotic species to reflect the balance between ecology, landscape and historic character. Potentially consider removal of deer fencing once the new planting is fully established to enable deer to maintain an open canopy floor similar to other spinneys throughout the park. Undertake phased removal of conifer plantation within Sliding Stone Spinney and replant with appropriate mixed broadleaved species. Replant gaps in Elder Plantation (in felled areas) with appropriate broadleaved species. | Medium-Long

22. The late 20th century birch planting in Hallgates CA along the Cropston Reservoir boundary should be managed and interpreted to enhance and promote their ecological interest. | Medium-Long

Deer Management

23. Repair collapsed sections of walls around Dale and Bowling Green spinneys to help retain areas of shelter for deer and to contribute to the historic landscape character of the park. | High

24. Retain controlled access to accommodate deer in Deer Meadow and Deer Sanctuary, especially during calving season. | High

25. Create deer wallows within recovering wet grassland/ remnant heath to help attract deer to participate in bracken management. | High-Medium

26. Undertake more active management of bracken as per prescriptions detailed in bracken section below to help re-balance available fodder and reduce presence of deer ticks and grazing pressure on rarer species such as creeping willow in High Park. | High-Medium

27. Continue to recognise the legitimacy of the sub-herd now occupying the ruins and manage accordingly, controlling numbers to conserve the important archaeology in this area. | High-Long

28. Improve interpretation about deer welfare to help inform the public about management requirements and encourage appropriate behaviour. | Medium

29. Consider reintroduction of water meadow management in the Deer Meadow CA to help maintain and improve sward, reduce parasite burden and allow for increased rotational grazing in other areas of the park. | Long

Historic character & presentation of specific features

30. Replace unsympathetic 20th century concrete repairs to the weirs with appropriate mortar repairs to enhance the presentation of these historic 19th century features. | Medium

31. Enhance the setting of the Keeper’s Lodge through targeted tree removal/pruning and garden maintenance to open views to this historic feature and improve its setting to balance with privacy of tenants. | Medium

32. Continue regular programme of stonewall monitoring and sympathetic repair. | Long
DETAILED MANAGEMENT GUIDANCE

Bracken control

8.4 Bracken is a long established part of the landscape at Bradgate Park but requires active management to prevent it overwhelming the associated plant communities of higher value and harming archaeology. This guidance provides an overview of more detailed information found in the HLS Bracken Management Plan, which should also be referred to in tandem with this report to ensure HLS requirements are being met (although these are summarised here in this Plan).

Rationale

8.5 The wet grassland/remnant heath found at Bradgate, which contributes to its SSSI status, is classified as Lowland Acid Grassland under the UK Biodiversity Action Plan and therefore a priority for conservation and improvement. The heath at Bradgate is fragmented and this has contributed to the expansion of bracken cover, which also has implications for archaeology and landscape character.

Summary of available management approaches

8.6 There are four main methods for controlling bracken:

- No control – On steep slopes, heavily grazed areas or where regeneration of other habitats to replace bracken is difficult and where wildlife considerations are important
- Maintenance or conservation management – Where it is desirable to maintain low intensity or patchy cover for supporting species and habitat for conservation importance, any control is likely to be limited and selective
- Limited control – Where the aim is to reduce the area or severely limit vigour and spread but not eliminate
- Eradication – where bracken is to be replaced with other vegetation

8.7 The intention at Bradgate is to actively manage the bracken in order to conserve and enhance other flora, specifically that contributing to the particular significance of the natural environment such as Creeping Willow, while retaining the contribution made to the landscape character by the bracken and its important role in providing cover and some forage for the deer herd. The vulnerable natural and archaeological environment at Bradgate removes certain available management options owing to topography, proximity to watercourses, mass visiting and the presence of deer, for example. The conservation outcome at Bradgate Park is bracken reduction coupled with vegetation re-establishment. Bracken removal in targeted locations is also desirable for the conservation of sensitive archaeological remains and to enable their further investigation.

8.8 The principal methods of control are either mechanical or chemical but both need to be seen as long-term controls.

Mechanical control:

- Cutting – To be undertaken twice each season at the end of July (later if ground nesting birds are present and once the bracken is 50 – 75cm high) and again six weeks later, with arisings removed but some litter retained to prevent re-colonization. Cutting is undertaken by hand (strimmer) or tractor mounted harvester/mower, where there will be no undue damage to archaeology.
- Crushing – This is less effective than cutting but more suitable for rocky terrain such as Bradgate. Crushing targets young brittle fons by rollers or bracken-bruisers attached to tractors or ATV’s to treat areas inaccessible to larger machine. Horses can also be used to pull rollers on especially sensitive ground. The use of any heavy machinery may damage archaeology, exacerbate erosion on sloping ground or pose a threat to ground nesting birds
- Livestock – Winter feeding can be used to attract animals onto the site to damage bracken buds and developing fronds close to the surface or emerged by crushing or grazing (cattle are more effective than sheep). This control also disturbs litter; breaking it up to increases frost penetration to the
rhizomes. This method can also be used to follow up on a sprayed area but needs to be balanced against potential damage to archaeology, to other vegetation and related impacts such as fencing, if necessary. Livestock needs to be removed in spring to prevent bracken poisoning. However, winter feeding of livestock is not an appropriate way of controlling bracken in low nutrient habitats which occur throughout Bradgate Park. This method of control is more suitable for improved habitats using heavier livestock such as cattle and where large nutrient inputs via surplus feed and animal faeces is not an issue.

- In very controlled circumstances burning can be used to help control bracken but the risk to livestock (including deer), the potential loss of other habitat and, specifically the veteran trees at Bradgate, would need to be carefully considered. Given also that burning can inadvertently promote the spread of bracken, this method of control should not be considered for Bradgate.

**Chemical control:**

8.9 Only two chemicals are currently available for treating bracken: Asulam (Asulox) and glyphosate (NB: note that legislation and recommendations may change).

8.10 Asulox is a selective herbicide with relatively little permanent effect on underlying vegetation but will kill other ferns. This chemical is also not approved for use in ATV mounted weed wipers.

8.11 Glyphosate is systemic and requires targeted application.

8.12 Both chemicals require additional permission to be used near any watercourse.

- If used at Bradgate, chemicals are to be applied after full frond expansion in mid summer (mid-July – September depending upon altitude, locality and season). Chemicals require targeted application with weed wipers, tractor mounted sprayers or knapsack spraying either from ATV or by hand. If properly applied a 90–98% kill can be expected with follow up spot treatments. Chemicals are applied on an annual basis with an anticipated three-year timetable to make significant impact.

8.13 Mixed mechanical and herbicide methods:

- The most effective and appropriate approach to control bracken at Bradgate Park would include both mechanical and chemical methods. This would affect bracken at both ends of its growing season, helping to reduce the plant spread over time. A single cut the year before spraying will produce an even canopy, higher density of fronds and more active buds on the rhizome, which in turn will allow for a better take up of chemical the following season.

**Recommended Management Approach**

8.14 The recommended management approach to bracken control at Bradgate is through a combination of rolling (i.e. crushing) and chemical control. The HLS targets are for 60% cover or less of unmanaged bracken by 2018 and for 35% cover or less by 2023 (which equates to 167 ha of bracken requiring management within land parcels SK53091276, SK53100314 & SK53100595). In bracken control areas, up to 15% - 20% cover of bracken will be acceptable where it occurs in small, scattered blocks and with a grass/herb understory, given the difficulty of total eradication of bracken.

8.15 Mechanical control treatments will reduce frond vigour, increase the frond density and result in more active buds on the rhizome which can help increase the effectiveness of subsequent herbicide treatments by a weed wiper. In such cases, follow-up could be by chemical spot treatment of individual fronds or mechanical removal. However, in general, two years should be allowed between phases of herbicide treatment in order to allow dormant buds on the surviving bracken rhizomes to emerge. An integrated approach can also reduce/avoid negative impacts such as the risks to breeding birds, reptiles and deer fawns/calves that may arise through repeated mechanical treatment by annual rolling/cutting.

8.16 Targeted areas should be rolled or cut at least twice each season (about mid-June when the bracken is 50-75cm high and again six weeks later). Cutting is the more effective method, but rolling will also continue to be appropriate at Bradgate given the difficult terrain. Chemical control should be undertaken on previously rolled/cut areas, on large areas through application of Glyphosate using weed-wipers in season (July-September). Spot treatment by knapsack sprayer may be useful for small areas and follow-up treatment such as around and within tree guards and more localised patches on steep
slopes and archaeological features. (Asulam is no longer approved under EU regulation and cannot be used after December 31st 2012 without exemption, whilst over-spraying of glyphosate using a vehicle-mounted sprayer is not appropriate at Bradgate Park because this will kill non-target plant species and damage the unimproved grassland/heath habitats).

8.17 Priority areas for bracken management through combined mechanical and chemical control have been identified in Figure 8.1. These have been selected with relation to the most significant or potentially significant areas of archaeology, which would benefit from bracken removal to protect remains and enable further investigation. These areas located in different parts of the park will also enable a variety of localised ecological habitats to re-colonise following the eradication of bracken, further benefitting and enhancing the SSSI. Note that these areas amount to 77 ha (63 ha for 1st priority areas & 14 Ha for 2nd priority areas), and thus only form part of the 102 ha requiring management by 2018 and total 167 ha by 2023 (refer to HLS Bracken Management Plan for full prescriptions). In order to meet full HLS requirements, assessment should be made of the most appropriate areas to be managed based upon the outcomes of managing the priority areas.

8.18 Emerging vegetation growth in areas of successfully managed bracken will also require consideration. Areas of low vegetation cover should be maintained as the predominant cover, although patches of scrub (e.g. gorse) should also be maintained in places to enhance the ecological matrix. However, scrub should not be permitted to grow over areas of known archaeology. The priority areas selected for bracken management deliberately extend beyond core areas of archaeological significance, so that patches of scrub growth may be appropriate in some of these peripheral areas of management (where not in conflict with recorded archaeology – refer to the archaeology survey).

8.19 Managing bracken according to the priority target areas and overall HLS targets (35% or less unmanaged bracken by 2023) will result in areas of unmanaged bracken to provide habitat for ground-nesting birds, mammals, reptiles and relict woodland flora.

**Grip blocking**

8.20 Bradgate Park contains the last remaining fragments of wet heath in Leicestershire in the north and eastern park but the combination of drainage, which is drying out the lower slopes of the wetland areas, and the encroachment of bracken within them is reducing plant diversity and affecting the quality of the SSSI. The underlying geology and soil are largely impermeable leading, historically, to surface wetting and shallow sub flow of water.

8.21 The areas of Hallgates and Sliding Stones were visited by the University of Sheffield as part of their Eco-hydrological observations on Bradgate Park, Leicestershire, 2006. In Hallgates, where the ground falls from c. 145m – 115m AOD, the downslope is interrupted by cross slope drains and oblique ditches, which have contributed to drying. The controlled rewetting of the downhill slopes in Hallgates is a priority for improvement of the overall condition of the SSSI. However, other areas in the park should also be considered as recent ditch blocking has been shown to increase the plant species associated with wet heath.

8.22 In Sliding Stones valley several drains occur down and across the slope leading to a pool on the north park boundary, which drains eventually to the Swithland Reservoir.

**Rationale**

8.23 According to Natural England’s 2010 SSSI Condition Assessment, Unit 20, which corresponds to three patches of purple moor-grass dominated wet heath within the north and east of the park, was recorded as being in ‘unfavourable and declining’ condition due to deer grazing and drainage. The conservation target is no further reduction in the area of wet heath coupled with re-vegetation of the wet area to increase habitat diversity and decrease erosion.

8.24 The eco-hydrological observations presented in the Sheffield University report suggest that it should be feasible to undertake a programme of restoration which will improve the condition and extent of wet heath habitat, while helping to restore natural drainage patterns and reduce hydrological change downstream (increase in flooding/silting).
8.25 In addition, and although there are no significant features in the areas in question, re-wetting land will help preserve archaeology and contribute to the enhancement and conservation of landscape character.

**Management approach**

8.26 The remedial ditch blocking at Hallgates Valley should be continued together with initial trials of ditch blocking at the other two main wet heath locations in the north of the park. This should initially involve the production of a management plan setting out the locations of where ditch blocking will be undertaken during the duration of the HLS agreement. The plan should also include a detailed location map of the ditch systems with information on historical features (the latter is very important because the ditch numbered 14 in the Slidingstone Hill Valley may be of historical value as the ditch runs alongside a bank which links to another ditch and bank on the other side of the covered reservoir that extends to the bottom of Hallgates Valley, which may be an old boundary of the Park).

8.27 The ditch blocks can be made of clay taken from nearby on site – but care should be taken to ensure that there isn’t much plant material mixed in with the substratum used. In order to promote the expansion of the Sphagnum / Erica patches; it would be beneficial to rake-off and remove accumulated thatch from around them. In addition, taller vegetation could be strimmed and removed from around selected areas.

8.28 Other options for grip blocking include solid dams made from materials such as corrugated plastic sheeting, plastic piling, and wooden structures:

- Solid dams can last for many years and are not prone to drying and cracking in dry periods like clay or peat dams. Solid dams can be particularly useful when blocking wide or deep drains.

- Dams constructed from corrugated plastic sheeting are easy to install and cause minimal disturbance to the site where the dam is being constructed. The sheeting should be pushed into the ground as far as possible, the top of the dam just exceeding the height of the grip.

- Interlocking plastic piling is available, and can be used to construct dams that are strong and watertight. Plastic piling is particularly useful for blocking wide drains but should be driven into the ground at least 40cm beneath the bottom of the dam should ground conditions allow.

8.29 A cheaper and less intrusive approach is simply to block the drain using a natural material to slow down the rate of water flow, thus encouraging silting and re-colonisation of natural vegetation. Heather and rush bales can be used and, in extremis, temporary materials such as natural fibre matting or old carpet. This option is likely to be favourable at Bradgate as it is also the most sensitive to archaeology, although the majority of the wet heathland areas do not coincide with significant concentrations of archaeological remains as depicted on the LiDAR, this should nevertheless be taken into consideration.

8.30 Implications of potential flash-flooding events with relation to grip-blocking should be considered and monitoring undertaken to assess any other consequences.

8.31 The management plan should inform these various options.

---

12 Building on the recommendations of the Sheffield University report and input from Ian Evans, Natural England
The tree survey has identified a number of historic, veteran and ancient trees requiring further management, and these works have been specified within Tree Survey Schedule (Appendix 1) – see also Figure 8.2, which provides a summary location of these. Given the historic, ecological and landscape significance of the trees of Bradgate Park every effort should be made to prolong the life of such an

Trees & Woodland

Tree management

8.32 The tree survey has identified a number of historic, veteran and ancient trees requiring further management, and these works have been specified within Tree Survey Schedule (Appendix 1) – see also Figure 8.2, which provides a summary location of these. Given the historic, ecological and landscape significance of the trees of Bradgate Park every effort should be made to prolong the life of such an
important resource. 78 trees have been identified for tree surgery and 4 trees for further inspection. The three major management measures recommended include crown reduction, shade management and limb stabilisation.

8.33 An arborist who is appropriately qualified and experienced in the management of veteran and ancient trees should be employed to undertake these works. Where these works have the potential to affect bat roosts or deadwood habitat, consultation should be undertaken with an ecologist first. There are certain specialist techniques that are appropriate for the management of veteran trees.

8.34 Suitable techniques and associated terminology are provided in the Tree Management Specification (see Appendix 1). The arborists employed to work on the old trees should understand the principles behind the proposed management works and the frailty of veteran trees. Only arborists with experience of working on veteran trees should be employed, or alternatively local staff could be trained to use appropriate techniques. The arborists that carry out the management works must be provided with a complete copy of the management specification to inform them of the principles that are behind the works recommendations.

8.35 Trees numbered 1143, 1178, 1699 and 2998 should be addressed as the highest priority.

8.36 Records of management works to each tree should be recorded to enable effective monitoring and subsequently inform site-wide management practices in the future.

Measures to Reduce the Spread of Acute Oak Decline

8.37 Several of the trees observed during the survey were showing symptoms are consistent with acute oak decline, particularly in the areas around Thorn Spinney. The cause of this disorder is currently unclear, but it seems to be associated with some previously unknown bacteria and with the oak jewel beetle (Agrilis bipunctata [= panonica]).

8.38 As a precautionary measure, to minimise the risk of spreading acute oak decline, the following measures should be taken:

a) Avoid arboricultural works, vehicle use and other types of ground disturbance when conditions or trees are wet because these activities could increase the chances of spreading the pathogen(s);

b) Strip the outer bark and sapwood of heavily infected and dying or dead trees and burn on site (but make sure that no burning is carried out within 15m of any trees). Rapid destruction of stripped bark is recommended to prevent the possibility of spreading the disease;

c) You can chip the bark on site but the bark chipper should be disinfected before leaving the site. Chips should be left in piles and allowed to decompose naturally to minimise the risk of the bacteria being spread;

d) Do not use bark chips or other parts of infected trees (e.g. leaves, bark, wood) for mulch, compost or soil conditioner.

8.39 Felling and pruning equipment should be disinfected after use. Pruning equipment should be cleaned and disinfected after use on an infected tree before moving on to the next tree. The soles of footwear and vehicle tyres should be cleaned before leaving the site by removing mud and debris and spraying with disinfectant.

New tree planting

8.40 The landscape of Bradgate Park is quite different to many other Registered Parklands in that it has the character of a medieval deer park, rather than a ‘polite’ 18th/19th century landscape park composed of carefully placed specimen trees, clumps and perimeter belts. Accurate placing of individual trees and clumps is therefore less important at Bradgate and the overall focus should be to manage and perpetuate the overall tree population and cover throughout the park. The approach to new tree planting at Bradgate should consider the following:

- Propogation of oak trees from on site seed source to provide continuity of genetic stock.
- Consider options to establish an on-site tree nursery or contract growing and/or develop a community involvement/volunteer project to propogate trees.
• Undertake replication of ornamental tree planting in Little Matlock and within the Deer Sanctuary including Cedar of Lebanon, Monkey Puzzle and Blue Atlas Cedar, as well as *Tilia cordata/vulgaris* in Tyburn.

• Characteristic tree species include English Oak and Sweet Chestnut, which should be prioritised in planting while allowing for a percentage of diversification, to include trees such as Sessile Oak.

• Hawthorn may also be planted as an additional nectar source and shelter as an essential component in sustaining the ecological interest of the SSSI.

8.41 New planting should be limited to the phased replacement of trees which have died or which need to be felled because they are too close to existing veterans or are an inappropriate species (e.g. *Quercus cerris* and *Quercus rubra*). Any new ceremonial planting should gain individual consent from Natural England.

**Woodland management**

8.42 The woodlands are not covered within the HLS agreement but are subject to separate Woodland Grant Schemes, and their management should be guided by the independent woodland management plans.

8.43 The late 20th century birch planting in Hallgates CA along the Cropston Reservoir boundary should be managed and interpreted to enhance and promote their ecological interest.

**Archaeology**

8.44 Archaeological survey of the Creswellian site and wider Little Matlock should be undertaken this autumn (Sept/Oct 2014) as follows:

a. Additional test pits (TP) to be dug around the outskirts of the existing 'known' focus of lithics to identify how far this site extends to the north, underneath the bracken, and also to identify whether any lithics survive along the base of the outcrop upon which the existing excavation has been done. The line of test pits 6, 3 & 8 produced larger débitage, and TP 6 also produced tools, and thus ULAS suggests to mirror this line 5m out into the bracken to the north with three further test pits. Three test pits could also be excavated at the base of the rock outcrop, positions with some potential for lean-to shelters, and possibly one further pit to the south of the leat, to demonstrate the deposits away from deeper hill wash and onto the alluvial floodplain. The supporting rationale is that the risks associated with commissioning an open-area excavation of this site before we fully understand its likely extent are too high to be easily managed with the existing time-frame and funding deadlines. Further assessment in these two discrete areas may help to define the edges of site, or may indicate additional deposits beneath the bracken. In either case, the results will provide a robust evidence-base, which will inform the creation of a WSI (written scheme of investigation) for subsequent open-area excavation.

b. A brief but detailed walk-over survey of the entire northern ridge at Little Matlock, in order to double-check that there are not other localised areas of lithics elsewhere along the ridge that may require immediate conservation measures. A series of photographs can highlight areas of potential (flat ground with a good viewpoint, some rock cover) and areas of erosion. A one-day walkover survey of the southern side of the ridge should also be considered to assess natural erosion, which could also record any likely spots where Upper Palaeolithic occupation might be expected. It should be noted that this element of survey has been agreed as a 'double-check' of the current working assumption that the major focus of archaeological evidence exists at the known Creswellian site at the eastern end of Little Matlock and that the ridge does not contain additional sites of similar significance.

(Note: There is very little evidence to suggest that the Creswellian archaeological deposits extend west along the ridge (a single lithic discovered towards the western edge of this ridge being the only known evidence). Whilst the entire ridge was no doubt used by prehistoric man, it is fair to say that this activity did not necessarily generate any archaeological evidence along the ridge itself. Significant areas of visitor and natural erosion exist along this ridge, and it is likely that lithics would have been discovered by now had a second major Creswellian site existed here, especially since the site has been repeatedly examined by skilled and knowledgeable people for over 15 years. The lack of evidence in this regard points to one of two scenarios: either there are no such Creswellian deposits along the...
ridge or where they exist at depth and are being adequately preserved in situ. In either case, they are unlikely to be a priority for funding under the HLS agreement (in stark contrast to the known site at the eastern end of Little Matlock). Thus despite the assumption that the major Creswellian components of this landscape have already been identified, it is felt prudent by Natural England to limit the risks associated with focussing attention on the known site by commissioning this element of walk-over survey along the entire ridge edge under HLS).

8.45 Next Spring (Feb/Mar’15), an open-area excavation of the known Creswellian site should be undertaken at the eastern end of Little Matlock, effectively preserving the site by record. The precise nature of this excavation will be informed by the above additional survey, but is likely to involve open excavation using a chequer board method, of an area around 10m x 10m. The WSI for this work will need be scrutinised by all parties well in advance of any work commencing on site, and may be informed by discussions that Lynden Cooper of ULAS will have with specialist peers over the coming months.

8.46 More broadly, a much wider, holistic study is needed along both ridges of Little Matlock, as well as along the alluvial plain within the ‘canyon’ and as it extends out into the park. This survey could utilise a myriad of different techniques, which might include detailed palaeoenvironmental sampling and analysis, detailed walk-over survey of the southern ridge, palaeochannel mapping within the alluvial plain, etc. There are any number of questions that additional research and survey could help answer at this site. Whilst these are unlikely to form part of the high priority works funded by the HLS agreement, the Bradgate Park Trust should actively explore opportunities for undertaking these surveys with volunteer groups and through other funding avenues (e.g. HLF) as appropriate, to better understand this potentially highly significant landscape.

8.47 Archaeological features throughout the park should be monitored for erosion and impact from deer, visitors and management practices. The bracken management prescriptions identify archaeological considerations and Figure 8.1 details areas of significance or potential significance to be targeted for chemical bracken control and further investigation. Erosion of possible prehistoric earthworks to the north of Old John where intersected by footpaths is a concern.

8.48 Onsite interpretation of survey and excavations works should be included in proposals to promote understanding and appreciation by the visiting public.

**Visitor Access & Interpretation**

8.49 A number of circular or cohesive visitor routes have been proposed in Figure 8.3 to encourage fuller exploration of Bradgate Park. These tie in with features of interest to be found within the park, some or all of which could provide the basis for interpretation within the park, through a combination of discreet and sympathetic interpretation panels for the major features and digital interpretation via mobile phone app technology. These routes could be promoted on maps and display panels by the park entrances and in the shop/café, with illustrations of features of interest to further encourage the visitor to make the effort to explore the multitude of interests available within the park.
Figure 8.1: Targeted Bracken Control & archaeological investigation

Priority areas targeted for combined cutting & chemical bracken control:

First Priority (62ha)
Second Priority (14ha)

Archaeological survey by priority:

a(i). Undertake 2 phase survey of Little Matlock Gorge as per prescriptions.

a(ii). Undertake further archaeological survey following bracken clearance.

b(i). Site prospection of Little Matlock Gorge and alluvial plain & further evaluation for Palaeolithic activity.

b(ii). Undertake further archaeological survey of possible prehistoric archaeology following bracken clearance.

c. Undertake further archaeological survey of possible prehistoric archaeology following bracken clearance.

d. Undertake further archaeological survey of park pale alignments following bracken clearance.

e. Undertake further archaeological survey of medieval earthworks following bracken clearance.

f. Undertake further archaeological survey of undated ditch features following bracken clearance.
Bradgate Park

Figure 8.2: Tree Management

Key
- Study Area
- Character Areas

Tree Works by Priority:
- 1 (10)
- 2 (42)
- 3 (24)
- RM (4)

Date: 05/05/2014

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Proposed Major Access Routes:
- Main Tarmac drive
- Bowling Green Loop
- Old John Circuit (Key views)
- Racecourse Circuit
- Dale Spinney Loop (Connecting route)

Main Features of Interest:
- House & Garden remains
- Deer Barn
- Old John Tower
- Yeomanry War Memorial

Archaeology of potential interest:
- Possible prehistoric earthworks
- Upper Palaeolithic Site
- Medieval Moated Site
- Medieval remains
- Medieval leat

Landscape Features of Interest:
- Little Matlock Valley
- The oldest tree in Bradgate Park
- Collection of ancient pollards
- River Lyn cascades & pools
- Wet heathland habitat
- Geological feature

Date: 05/05/2014

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9. **Schedule of Works**

9.1 The following schedules set out the recommended restoration and management proposals to be implemented through the Higher Level Stewardship Scheme. The schedule details individual operations required to deliver repair/restoration proposals and optimum management of the Park, showing a clear prioritisation of the work required. The works itemised here relate to land identified as being included within the Bradgate Trust’s remit.

9.2 The schedule of works is divided into the following:

- **Annual management items**: these are annual management options, receiving payments annually.
- **Standard capital items**: these include works attracting one-off payments such as tree planting, tree surgery and tree removal, as well as more tailored projects to be funded under the HAP code.

9.3 The schedules have been prepared in a format, which will allow information to be easily transferred to standard Natural England forms. More detailed descriptions of works identified are included in Chapter 8 and 10.

### ANNUAL MANAGEMENT ITEMS RECEIVING ANNUAL PAYMENTS

9.4 The following annual management options are applicable:

<table>
<thead>
<tr>
<th>HLS Code</th>
<th>Management Option</th>
<th>Payment</th>
<th>Unit</th>
<th>Character Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO1</td>
<td>Maintenance of lowland heathland</td>
<td>£200</td>
<td>ha</td>
<td>High Park, Middle Park and Hallgates</td>
</tr>
<tr>
<td>HO2</td>
<td>Restoration of lowland heathland</td>
<td>£200</td>
<td>ha</td>
<td>High Park, Middle Park and Hallgates</td>
</tr>
<tr>
<td>HC12/13</td>
<td>Maintenance and restoration of woodland pasture and parkland</td>
<td>£180</td>
<td>ha</td>
<td>Deer Sanctuary, Low Park, Newtown Lawns</td>
</tr>
<tr>
<td>HC7</td>
<td>Maintenance of woodland</td>
<td>£100</td>
<td>ha</td>
<td>Site-wide/spinneys</td>
</tr>
<tr>
<td>HR5</td>
<td>Bracken control supplement</td>
<td>£35</td>
<td>ha</td>
<td>Site-wide</td>
</tr>
<tr>
<td>HR2</td>
<td>Native breeds at risk supplement</td>
<td>up to £70</td>
<td>ha</td>
<td>Site-wide (bracken management)</td>
</tr>
</tbody>
</table>
## CAPITAL ITEMS

<table>
<thead>
<tr>
<th>CA</th>
<th>Priority</th>
<th>Item Code</th>
<th>Item Description</th>
<th>Length, area, number</th>
<th>HLS grant</th>
<th>Relates to management action</th>
<th>Detail/Justification</th>
</tr>
</thead>
</table>
|    | 1= years 1-3  
2= years 4-5  
3= years 6-10 |           |                  |                      |           |                             |                      |
|    | **CAPITAL ITEMS** | Item Code | Item Description | Length, area, number | HLS grant | Relates to management action | Detail/Justification |
|    |                      |           |                  |                      |           |                             |                      |
| 1  | BCB  | Chemical bracken control base payment | Site wide | £61.00 pa | 5 | To enhance condition of SSSI and historic landscape |
| 1  | BCA  | Chemical bracken control area payment (£112.00 ha) | 167 ha (to meet NE’s requirement for target area for unmanaged bracken in 2023 @ 35% cover or less within land parcels SK53091276, SK53100314, SK53100595) | £18,480 | 5 | To enhance condition of SSSI and historic landscape |
| 1  | BMB  | Mechanical bracken control base payment | Site wide | £106.00 pa | 5 | To enhance condition of SSSI and historic landscape |
| 1  | BMA  | Mechanical bracken control area payment (£48.00 ha) | 167 ha (to meet NE’s requirement for target area for unmanaged bracken in 2023 @ 35% cover or less within land parcels SK53091276, SK53100314, SK53100595) | £7,920 | 5 | To enhance condition of SSSI and historic landscape |
| 1  | WPS  | Construction of water-penning structures up to 100% of costs for structures and for feasibility and/or hydrological implementation plans | Preparation of management plan to inform approach to re-wetting of degraded wet heath areas in Hallgates & around Sliding Stone Spinney  
Construction of water-penning structures as informed by the above plan | tbc | 6 | To improve condition of degraded wet heath habitats within SSSI |
<p>| 1  | TS2  | Tree surgery, major (£89 each) | 78 | £6,942 | 16 | To conserve and enhance historic landscape |</p>
<table>
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<tbody>
<tr>
<td>1 - 3</td>
<td>STT</td>
<td>Tree planting (£7.50)</td>
<td>Allow for 100 trees over the lifespan of HLS agreement</td>
<td>£750</td>
<td>20</td>
<td>Extensive planting has recently been undertaken through CSS, so new planting should be limited to the phased replacement of trees which have died or which need to be felled because they are too close to existing veterans or are an inappropriate species</td>
</tr>
<tr>
<td>1 - 3</td>
<td>TP</td>
<td>Parkland tree guard—post and wire (wood) (£64.00 each)</td>
<td>Allow for 100 trees over the lifespan of HLS agreement</td>
<td>£6,400</td>
<td>20</td>
<td>Tree planting to focus on succession planting of ornamentals in Little Matlock &amp; Deer Sanctuary and veterans throughout park</td>
</tr>
</tbody>
</table>

### Site wide actions

<p>| | | | | | | |</p>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HAP 1</td>
<td>Parkland Management Plan</td>
<td>£29,750</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1 | HAP 2 | Research and conservation of the Creswellian site & Little Matlock Gorge:  
**Outline costs:**  
Archaeology survey, part 1: including walkover and test-pit surveys and reporting, as per ULAS quote (£4,597.50)  
Archaeology survey, part 2: comprising excavation of Creswellian site, as per ULAS quote (tbc) | tbc | Work will require engagement with LCC and EH archaeologists and NE in regard of implications for SSSI |
| 1 | HAP 3 | Further archaeological investigations as prioritised in Figure 8.1, including:  
- Possible prehistoric earthworks  
- Medieval earthworks | £15,000–£20,000  
£7,500–£10,000 | The landscape demands holistic understanding including undesignated archaeology, which may include highly significant prehistoric remains, in order to inform management, further research and interpretation. |
<table>
<thead>
<tr>
<th></th>
<th>HAP 4</th>
<th>Further research to better understand Tudor garden remains to inform conservation and interpretation: <strong>Outline costs:</strong> Survey &amp; Management Plan to inform understanding &amp; conservation (£15,000-£20,000)</th>
<th>£15,000-£20,000</th>
<th>To better understand the evolution and role of the Tudor gardens within the landscape and as an important example of sixteenth century garden design in the East Midlands. This work will help inform future management of the sub deer herd and visitor operations.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HAP 5</td>
<td>Site-wide interpretation: <strong>Outline costs:</strong> Interpretation panels: £20,000 Waymarkers: £8,000 Interpretation panel design: £10,000-£15,000</td>
<td>Approx. 15 panels (£1,000 – 1,500 per panel)</td>
<td>To include interpretation design &amp; implementation and relevant site furniture.</td>
</tr>
<tr>
<td></td>
<td>HAP 6</td>
<td>Restoration of unsympathetic repairs to weirs along the Lin</td>
<td>£20,000-£25,000</td>
<td>Conservation and enhanced presentation of historic features</td>
</tr>
</tbody>
</table>
10. Outline HLS Capital Item Descriptions

10.1 The following notes provide a more detailed outline of the work to be completed under Higher Level Stewardship Capital Items. Note that given the sensitive ecological and archaeological nature of the site, the procedures set out in Chapter 11 below must be carefully followed before any invasive or potentially damaging works (e.g. tree planting or removal) is undertaken.

**TS2 tree surgery – to include major pollarding**

10.2 The tree survey has identified a number of historic, veteran and ancient trees requiring further management, and these works have been specified within the schedule. Given the historic, ecological and landscape significance of the trees of Bradgate Park every effort should be made to prolong the life of such an important resource. 80 trees have been identified for tree surgery or further inspection. The three major management measures recommended include crown reduction, shade management and limb stabilisation. A qualified tree surgeon should be employed to undertake these works.

10.3 Trees numbered 1143, 1178, 1699 and 2998 should be addressed as the highest priority.

10.4 See detailed management guidance in Chapter 8

**WPS grip blocking drainage channels**

10.5 Bradgate Park contains the last remaining fragments of wet heath in Leicestershire in the north and eastern park but the combination of drainage, which is drying out the lower slopes of the wetland areas, and the encroachment of bracken within them is reducing plant diversity and affecting the quality of the SSSI. The underlying geology and soil are largely impermeable leading, historically, to surface wetting and shallow sub flow of water.

10.6 Hallgates and Sliding Stone valley are particularly affected by the drying out of the wetland areas, identified as ‘unfavourable and declining’ in the 2011 NE Condition Assessment. This option has therefore been identified to help restore the wet heath (see detailed management guidance in Chapter 8).

**Bracken control**

10.7 Bracken control is a priority action at Bradgate Park to help improve the SSSI and restore a better balance to the landscape character. Management of bracken will be long-term and include a combination of mechanical i.e. cutting and crushing and chemical treatments. This would affect bracken at both ends of its growing season, helping to reduce the plant spread over time. A single cut the year before spraying will produce an even canopy, higher density of fronds and more active buds on the rhizome, which in turn will allow for a better take up of chemical the following season. The following payment options apply:

**BMB/BMA Mechanical bracken control – base & area payment**

**BCB/BCA Chemical bracken control – base & area payment**

10.8 The plan has identified priority areas for mechanical and chemical bracken control within Bradgate Park (Figure 8.1); for detailed management guidance refer to Chapter 8.

**STT/TP standard parkland tree and planting**

10.9 See Chapter 8 for management guidance.
HAP Projects (Historical and archaeological feature protection)

10.10 A number of specifically-tailored projects have been identified for funding under the HAP code as follows:

**HAP 1 – Parkland Plan**

10.11 This Parkland Management Plan provides the results of HAP 1 and is therefore complete.

*Cost* - £29,750 (exc. VAT)

**HAP 2 – Research and conservation of the Late Upper Palaeolithic site in Newtown Lawns**

10.12 Following excavation in 2014 (Cooper & Hardy) the significance of the Creswellian flint working found at Bradgate has increased and is considered to be of Very High Value in terms of Cultural Heritage. However, the site is increasingly vulnerable to erosion by footfall and weather and requires further recording and conservation (to include the option to preserve in situ). This HAP will fund as follows:

- Detailed archaeological survey of the full area of the potential Creswellian remains, resulting in a report that records a full understanding of the asset and its significance, and outlines management recommendations
  *Outline cost* - £7,000 (to include GPS and mapping survey, pollen sampling, macrofossil sampling, radio-carbon dating and analysis reporting)

- Any relevant ecological surveys (e.g. Lichen or Invertebrate Surveys)
  *Outline cost* - £4,000 (to include presence/absence surveys, construction method statement and detailing of any mitigation measures required)

- Preparation of a Management Plan
  *Outline cost* - £6,500 (to include drawing together the above survey work and detailing management actions required along with the preparation of a specification of works and tendering of the work to contractors).

**HAP 3 – Further archaeological investigations**

10.13 This plan has drawn attention to the rich but undesignated archaeology surviving in Bradgate Park, which may include Prehistoric, Iron Age and Medieval field systems and enclosures. This archaeology is integral to the SSSI, the attempts to farm the landscape having been shaped by the geology and having contributed to the emergent ecology. Should evidence be found to clearly identify Prehistoric features these would hold national and regional significance due to their rarity and may justify a review of heritage designations at Bradgate Park. The presence of bracken within the park has contributed to the arguably low appreciation of many of these features to date and a new programme of bracken control and removal will form part of the wider benefits to the park delivered by this plan. (Note: some of the features identified by recent survey extend beyond the study area of this plan, NE, the Bradgate Park Trust and LCC will need to agree the relative funding eligible under this HLS agreement and strategy to address features holistically)

- Phased survey of undesignated archaeology prioritising High and Middle Park and Hallgates to collate and ground truth existing understanding
  *Outline cost* - £6,000 (to include targeted field recording of identified features, which may include limited hand excavation, recording, assessment and post excavation and analysis)

**HAP 4 – Further research to better understand Tudor garden remains to inform conservation and interpretation**

10.14 The gardens of Bradgate House were one of the finest examples of a gentry Tudor garden to be found in the East Midlands and integral to the design and layout of the new house of Thomas Grey (2nd Marquess). Little archive evidence survives of the gardens, although the plan form is clear upon the ground, and given the suggestion by Squires and Humphrey’s that Kniff may have embellished the record in his c. 1700 engraving the need for further investigation is felt justified. The area is occupied by
a sub-deer herd and while this holds some benefit, including the partial grazing off of grass and scrub, the deer are eroding the area through poaching and damage to upstanding remains through jumping in and out of the enclosure. The use of the area for events also increases risk to the historic remains through increased wear and inadvertent damage by vehicles and visitors. This HAP will fund as follows:

- Detailed archaeological survey of the full area of the garden area, resulting in a report that records a full understanding of the asset and its significance, and outlines management recommendations
  
  **Outline costs - £5,000**  (to include targeted geophysical survey and potentially limited trenching to establish the garden levels and principal axis)

- Any relevant ecological surveys (e.g. Lichen, Invertebrate, Reptile Surveys)
  
  **Outline costs - £3,000**  (to include presence/absence surveys, construction method statement and detailing of any mitigation measures required)

- Preparation of a Management Plan
  
  **Outline costs - £3,000**  (to include drawing together the above survey work and detailing management actions required along with the preparation of a specification of works and tendering of the work to contractors, as necessary)

**HAP 5 – Site-wide interpretation**

- Bradgate Park contains a wealth of fascinating features that are currently not being interpreted to visitors. The landscape is literally bursting with interest, and this option provides a unique opportunity to bring the resource to life, so that it is better understood and thus more likely to be appreciated and conserved by visitors and by future generations. Features to be interpreted on a 'journey' around the property include the undesignated archaeological remains, including ancient field systems, the medieval pale, possible remains of the village, the leat and the site of the gatehouse, for instance. Interpretation should endeavour to be informative whilst capturing the imagination, as well as having a minimal physical impact upon the landscape.

  **Outline cost - £15,000**  (to include further archaeological investigation, interpretation design and relevant site furniture)

**HAP 6 – Restoration of unsympathetic repairs to weirs along the Lin**

- The 19th century stone weirs along the River Lin have been repaired during the 20th century using inappropriate materials (concrete) and methods, which detracts from this Picturesque design feature. Replacement of these repairs with sympathetic materials and techniques should be undertaken in order to restore the historic character of the feature whilst maintaining functionality. Work should be undertaken by a contractor suitably qualified in the restoration and conservation of historic buildings and structures, with details of repair to be agreed by Natural England and English Heritage in advance of any work being undertaken.

  **Outline cost - £20,000 - £25,000**
11. Implementation and Review

IMPLEMENTING THE PLAN

The management planning cycle

11.1 The Parkland Management Plan will be continually reviewed, revised and re-written. The cycle for the Plan is to:

- Write and adopt the Plan.
- Operate according to the strategy and policies held within the Plan.
- Monitor the operation of the Plan.
- Review the working of the Plan.
- Revise and improve the Plan where necessary to reflect on-going developments such as changes to visitor access or revised financial projections.

Planning and implementing projects

Project development

11.2 Some of the projects will require further planning and design development and may require the input of specialist professionals experienced in the conservation, restoration and management of historic buildings and landscapes.

11.3 Any management actions that may have a negative impact upon the significance of the property (e.g. archaeological remains and ecological values such as the presence of legally-protected species such as birds and bats) will be fully considered prior to implementation. Impact assessments may be required as part of the development of design and management proposals to ensure potential impacts are identified at an early stage and therefore subject to appropriate mitigation measures.

Permissions and Agreements

11.4 Due to the high level of significance of the built, archaeological and natural fabric and features at Bradgate Park, many of the management actions outlined within this plan will require consent. The range of consents required might include Listed Building Consent, Planning Consent, Protected Species Licences and Scheduled Monument Consent. The agreement holder may also require a felling licence for some of the operations recommended in the PMP, as well as specific permits from the Environment Agency if the operations affect a watercourse. Section 28E consent may also be required for operations undertaken on the SSSI, which are not permitted under the HLS agreement and where an existing s28E consent has not already been granted.

11.5 The type of work proposed within this plan that is likely to require consent includes:

- Tree planting, management and removal/uprooting (Scheduled Monument Consent and Notice of Proposed Works to Trees in a Conservation Area).
- Any form of digging or excavation included within or in associated with the proposed HAP projects including installation of grip blocks (Scheduled Monument Consent).
- Further archaeological investigations where they involve trenching (Scheduled Monument Consent).
- Installation of infrastructure relating to access including gates, paths, car parking, installation of signboards or posts for interpretation or waymarking (Planning Consent and Scheduled Monument Consent).
Scheduled Monument Consent

11.6 It is a criminal offence to destroy or damage a scheduled monument either intentionally or through recklessness. It is also a criminal offence to carry out or to permit others to carry out unauthorised works to a scheduled monument, i.e. works undertaken without Scheduled Monument or Class Consent. The use of metal detecting equipment on a scheduled site is illegal without the written consent of English Heritage, as is the removal of objects found by detection equipment.

11.7 Certain operations that may be particularly damaging to the buried archaeological remains will require consent: for example, ploughing where this does not already have Class Consent; ploughing to a greater depth than that previously carried out lawfully; subsoiling; drainage works; the stripping of top soil; tipping operations; and building work, including demolition.

11.8 Advice should be sought in the first instance from the County Archaeologist and subsequently from English Heritage.

Contact

Historic & Natural Environment Team, Planning Historic and Natural Environment, Leicestershire County Council, County Hall, Leicester Road, Glenfield, Leicestershire, LE3 8RA

Principal Planning Archaeologist, Richard Clark

Telephone: (0116) 305 8322
E-mail: Richard.Clark@leics.gov.uk

English Heritage East Midlands, 44 Derngate, Northampton, NN1 1UH

Inspector of Ancient Monuments and Buildings, Tim Allen

Telephone: 01604 735400 Fax: 01604 735401
E-mail: eastmidlands@english-heritage.org.uk

Protected species

11.9 Following changes to the Habitats Regulations, introduced on 21 August 2007, anyone carrying out certain land management activities, including some required as part of an agri-environment agreement (including Environmental Stewardship), will need to consider first the presence of European Protected species (bats, otters & great crested newts) and, if any are present, ensure that their work does not disturb the species or damage their resting place or breeding site. Farmers, land managers and their contractors should check before carrying out any work to reduce the risk of inadvertently breaching the revised Regulations.

11.10 The main species likely to be encountered at Bradgate Park are:

- Bats Roosts in buildings and trees
- Great Crested Newts in ponds and their surround
- Breeding birds

11.11 Under Section 1 of the Wildlife and Countryside Act 1981 (as amended), wild birds are protected from being killed, injured or captured, while their nests and eggs are protected from being damaged, destroyed or taken. In addition, certain species such as the barn owl are included in Schedule 1 of the Act and are protected against disturbance while nesting and when they have dependent young. Offences against birds listed on Schedule 1 of the Wildlife and Countryside Act are subject to special penalties.

11.12 The following species are also found in Bradgate Park and are protected under the Wildlife and Countryside Act 1981 (as amended):

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13 http://www.english-heritage.org.uk/content/imported-docs/p-t/guideforownersofsams.pdf
• Oak polypore *Piptoporus quercinus* (Schedule 8 plant associated with veteran trees protected in respect of picking, uprooting and destroying)
• Adder *Vipera berus* (in respect of killing, injuring and offering for sale)
• Slow worm *Anguis fragilis* (in respect of killing, injuring and offering for sale)
• Grass snake *Natrix natrix* (in respect of killing, injuring and offering for sale)
• Viviparous lizard *Lucerta vivipara* (in respect of killing, injuring and offering for sale)
• Toad *Bufo bufo* (in respect offering for sale)
• Common frog *Rana temporaria* (in respect of offering for sale)
• Smooth newt *Triturus vulgaris* (in respect of offering for sale)
• Palmate newt *Triturus helveticus* (in respect of offering for sale)
• White-clawed crawfish *Austropotamobius pallipes* (in respect of taking and offering for sale)

11.13 Advice should be sought in the first instance from Natural England.

**Contact**
Natural England (for land management advice)
Apex Court
City Link
Nottingham
NG2 4LA
Tel: 0300 060 2979
[www.naturalengland.org.uk](http://www.naturalengland.org.uk)
National telephone number: 0845 600 3078 (for general advice)
enquiries@naturalengland.org.uk

**Monitoring and review**

11.14 The steering group/trustees should meet on an annual basis to discuss the on-going conservation of Bradgate Park and to agree upon and implement the management actions recommended in the Plan. The outcomes of the meeting will the inform business planning for the park.

11.15 This Parkland Management Plan has a minimum life span of 10 years, with a five-year review, although it is currently envisaged that most of the policies will continue to guide the conservation and evolution of the wider estate through the longer term for future generations.

**Further survey and gaps in understanding**

11.16 A number of areas for further survey have been identified including:
• Further investigation of Upper Palaeolithic activity
• Further survey to establish significance of possible prehistoric earthworks
• Clarification on the line of the original park pale
• Development and later decline of the medieval village
• The picturesque landscape of the mid – late nineteenth century
• The use of the park during the Second World War
12. References

Books & Journals

- Squire, A. & Humphreys, W. *The Medieval Parks of Charnwood Forest*, 1986

Statutory Information

- National Heritage List for England, list entries: Bradgate Park (PAG), Bradgate House, Mansion Remains, Moated Ruins (SM), Old John Tower and War memorial

Natural England:

- Citation, Bradgate Park and Cropston Reservoir SSSI
- Conservation Objectives, Bradgate Park and Cropston Reservoir, 2011

Charnwood Borough Council:

- Charnwood Local Plan, Borough of Charnwood Landscape Character Assessment, 2012

The Bradgate Trust

- Bradgate Park Deer Management Plan, 2011
- English Woodland Grant Scheme, 2008 – 13 (approved 2009)
- Bradgate Park Trust, Leicestershire, SSSI Management Plan (2011-16), 2011

Historic landscape/ecology misc.

- Leicestershire, Leicester and Rutland Historic Landscape Characterisation, undated
- Bradgate and Beacon Landscape Character Assessment (fold out guide) undated
- Charnwood Forest, A Living Landscape, An integrated wildlife and geological conservation implementation plan, 2009
• Eco-hydrological observations on Bradgate Park, Leicestershire, B.D. Wheeler and S.C. Shaw, The University of Sheffield, 2006
• Landscape Tree Survey for Bradgate Park (with associated appendices), Boskyytrees, 2014
• Copy of Bradgate and Swithland bird surveys 2006 – 2013
• Bradgate Park, Leicestershire, A report upon deer management and the impact of the deer upon the habitat, P. Green, 2010
• Bradgate Deer Park, A Review of Management of the Deer and the Vegetation, Prof. R. Putman, 2010
• Bradgate Park, LNC combined records (fungi and rare plants) 2013
• Bradgate Park, SSSI, An Entomological Survey of Selected Sites in East Midlands Region, Project Co-ordinator, Dr D. A. Sheppard, c. 1988
• A Description of Bradgate Park and the Adjacent Country, with remarks on the Natural History of Charnwood Forest, c. 1829.
• A Guide to the Geology of Bradgate Park and Swithland Wood, Charnwood Forest, J. N. Carney (BGS), 2010
• The Leicestershire Lin, a river through time, E. Miller and A. Squires, p. 141-145 (date and publisher unknown)

Maps
• Kip and Knyff birds-eye view Bradgate House, c. 1700
• OSD 1815
• 1888, First Edition Ordnance Survey
• 1904, Second Edition Ordnance Survey
• 1950, Ordnance Survey
• 1969, aerial photograph

The Enville archive
• Landscape drawings (selection)
• Kiddiar survey, 1746
• Misc. correspondence regarding the construction of the park wall