

Londonthorpe Woods

Management Plan 2016-2021

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THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website <u>www.woodlandtrust.org.uk</u> or contact the Woodland Trust (<u>wopsmail@woodlandtrust.org.uk</u>) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- · Protect native woods, trees and their wildlife for the future
- · Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website <u>www.woodlandtrust.org.uk</u>. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

- 1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
- 2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
- 3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
- The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
- 5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
- 6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
- 7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
- 8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
- 9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Londonthorpe Woods
Location:	nr Grantham
Grid reference:	SK943375, OS 1:50,000 Sheet No. 130
Area:	77.21 hectares (190.79 acres)
Designations:	Access Land, Area of Landscape Value, Local Wildlife Site

2.0 SITE DESCRIPTION

2.1 Summary Description

An attractive wood with a range of habitats including an area of mature woodland and a pond, divided into three parts by roads. Grass pathways meander through the trees and open meadow areas ablaze with wild flowers in spring and summer.

2.2 Extended Description

Londonthorpe Wood consists of 60.6ha of native broadleaf woodland, including several large areas of open space. This comprises of 56.6ha woodland creation planted in three phase during 1993-95 on agricultural land on the edge of Belton Park and a smaller area (4.0ha) of mature wood on the top of the limestone escarpment above, dating back to the mid-1800s and is now a prominent feature in the landscape. Alma Park lies on the north edge of Grantham abutting an industrial estate, a large area of housing and adjoins the Trust's Londonthorpe Wood to the north. It is an area of open rough pasture donated to the Trust in 1993 by South Kesteven District Council, and is now designated open access land under the CROW act.

The whole of the site lies on the edge of Grantham abutting the town's industrial estate, the National Trust 's Belton Park property, the adjacent Woodland Trust Alma Park property and surrounding farmland. The proximity to Belton house and historical link to the Brownlow estate represent a significant opportunity for collaboration with the National Trust on several levels. (visitor engagement and experience, landscape and conservation management, and heritage messaging)

The new planting consists of mixed, mostly native, broadleaved species with ash and oak predominant. The first phase (cpt. 2) was planted in a solid block with around 20% linear open space. Whereas cpts 1 and 3, which came later, contain large areas of retained grassland through which blocks of trees have been planted. This is designed to reflect the "parkland" landscape associated with Belton Park, owned by the National Trust. The site contains many old veteran trees which are remnants of older parkland planting and the old hedgerows that transect the planting site.

Large open grassland areas are left unplanted for landscaping, amenity and habitat diversity reasons; integrating the woodland creation site with the adjacent Belton Park (National Trust). These meadow areas are very popular with dog walkers. Managed on a 2 year cutting rotation (since 2012) to prevent vegetation succession, un-mown areas contain natural regeneration and areas of scrub.

In 2007 2 areas of "forest of flowers" meadow creation was completed, with deep ploughing and sowing of a mixture of annuals and perennial meadow species. While initially stunning, many of the annual species have disappeared. However, an extensive expanse of Cow slips is becoming a highlight for visitors in early spring.

Visitor levels are very high and visitor provision is correspondingly at a high level with a car park for up to 12 cars and an extensive network of regularly mown paths throughout the area. Although much of the existing infrastructure is looking worn (2014) and would benefit from investment and upgrading.

Key features are: -Informal Public access -Open ground habitat -Secondary woodland.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus: The nearest bus stop is on the High Road opposite Church Lane, Londonthorpe and there are regular buses to and from Grantham town centre.

By train: The nearest train station is in Grantham, three miles from the wood.

For further information on public transport, contact Traveline on 0871 200 2233 or visit traveline.org.uk

By car: Londonthorpe Wood is situated on the north-east corner of Grantham and within close proximity of the A1 to the south. If heading north on the A1, turn off onto the B1174 - signposted for Grantham, Boston and Sleaford - and follow the road into Grantham. If heading south, either leave the A1 signposted for Downtown (B1174) or when signposted for Barrowby (A52) and follow both roads into Grantham.

From Grantham, head east out of the town, on the A52 towards Somerby Hill. Follow this road for approximately two miles and when you reach the roundabout at the top of the hill, take the first exit onto the High Dike (A52). After half a mile, turn left onto the High Dike (B6403), continue for two miles, then turn left onto High Road. After a further mile turn right and continue for approximately one hundred yards to the main entrance on the left-hand side, adjacent to the Woodland Trust car park which can accommodate twelve cars.

Maps: OS Explorer 247 and Landranger 130; Grid Reference: SK943375

3.2 Access / Walks

There are thirteen public access points around the site from the adjoining roads and tracks. All entrances are via stiles and kissing gates, which are suitable for disabled access.

Path networks, with numerous routes to follow around the wood, consist of mown tracks and unmodified earth surfaces, which can be slippery and muddy when wet. The terrain is generally flat to the north of the site, but rises to a steeper gradient leading up to Alma Wood. At this point, footpaths link to the adjacent Alma Park, but due to the terrain, access through may be difficult for some users.

4.0 LONG TERM POLICY

A species diverse native broadleaf woodland with a varied age structure and developed shrub layer. Large areas of open space maintained for landscape cohesion and to provide a quality habitat mosaic along side woodland ponds and small wetland areas (wet flushes). Management will support natural process, with intervention to maintain public access and demonstrate WT core objectives. The site will be robust in the face of climate change and its associated threats and be regularly enjoyed by the wider community for quiet informal recreation. Footpaths and rides will be maintained to high standard with signage, infrastructure and interpretation appropriate to the level of use and in line with latest Woodland Trust standards and branding.

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Secondary Woodland

Description

A large area of new native woodland together with associated open grassland on the outskirts of Grantham, planted between 1993-95 as a Woodland Creation Site. Also includes 4.0 ha of established broadleaved woodland on the hill above, thought to have been planted after 1854. The new planting has been established on what were the remains of peripheral parkland to the south of Belton House and a good scattering of veteran parkland and hedgerow trees (all oak or ash) lie within the area. The mature woodland area has, through previous neglect, old age and storm damage, reached the stage where a valuable and developing deadwood habitat is emerging. It also holds an approximation to an ancient woodland ground flora (NVC type W8) due to its presumed development next to an old hedgerow which has provided a nursery for colonisation. This in turn will act as a reservoir of woodland flora to colonise the new areas of planting in time.

Conservation features associated with this Key Feature are:

- 23 Veteran Trees (oak and ash)which are relics of the old parkland landscape and old hedgerows
- 2 ephemeral ponds. One of which was dug at the time of planting but has since been gradually drying up.

- Several old hedge rows that bisect the planted areas and one along the lane leading up to cpt 4.

Significance

- Significant area of accessible woodland on the outskirts of Grantham, the largest town in the South Kesteven district.

- The closest site to the Head office of Woodland Trust.

- It also provides a significant core area of woodland habitat in an area of very limited woodland cover and links well with other semi natural habitats around Belton Park.

- The mature Alma Wood together with the establishing compartment 2are an important landscape feature on hill top above the town and can be viewed from some distance away

Opportunities & Constraints

Opportunities:

- Large area of continuous woodland (>60ha) with logical links into the wider wooded/parkland landscape of Belton Park. (Nation Trust owned = likeminded conservation charity)

- The mature woodland has an important role in providing deadwood habitat for invertebrates which could be expanded - Matrix of habitats (woodland, open space, scrub, wild flower meadows, wetlands, maiden standards, establishing woodland and high forest) which could be developed and enhanced.

Constraints:

- Climate change/ pests and diseases... (*chalara) High proportion of Ash in existing woodland, new planting and dominant regeneration species

- Intensive agriculture to the east and south of the site.

- Ever-present development pressure (urban sprawl) from Grantham and satellite villages (Londonthopre, Belton and Harrowby)

Factors Causing Change

tree establishment tree senescence - vet' trees & cpt 4 (Alma wood) storm damage - cpt4 Pests and diseases *Chalara* Scrub encroachment of open space Increasing visitor numbers = disturbance (especially dogs) Deer browsing

Long term Objective (50 years+)

Native broadleaf high forest managed in support of natural processes. A mixture of native broadleaved species of tree, and a variety of age classes from new regeneration to veteran standards and everything in-between. Varied matrix of habitats will be maintained to add biodiversity and interest, as well as reflect the current and historic parkland landscape character.

Short term management Objectives for the plan period (5 years)

Woodland health and levels of scrub amongst the open areas of Londonthorpe (comp 1b&3b) to be assessed annually by the site manager. Mechanical scrub removal considered in line with WT objectives as appropriate to achieve the long term vision.

Explore the possibilities of viable wood fuel demonstration model in compartment 2 by end of the plan period.

Foster a relationship with the National Trust and explore opportunities for partnership working as appropriate over the plan period to achieve a more "joined up" management approach. This may include deer control, veteran tree management for overall landscape and biodiversity value, resilience to climate change (pests and disease), visitor experience, interpretation, heritage stories (WWI camp), joint enterprise, etc.

5.2 Informal Public Access

Description

The area lies on the northern outskirts of Grantham and is well used by local people as a venue for walking in association with the adjacent Londonthorpe Wood. Access can be gained directly from Londonthorpe Wood, directly off 5th Avenue in Grantham, or via the public footpath which comes from the Industrial Estate and bisects the property east/west. Kissing gates exist at all entry points and the whole site is designated open access land under the CROW act, but most stick to the mown paths. Despite the presence of stock through most of the year there have never been any problems with worrying by dogs and the grazing coexists quite happily with informal recreational access.

Significance

The area provides a good area of safe and informal recreation on the outskirts of Grantham and links the town with Lodonthorpe Wood and the countryside beyond. It has good footpath access and abuts to the housing estate on the southern boundary for which it forms an invaluable resource and attractive backdrop.

Opportunities & Constraints

Opportunities:

- Good pedestrian access vial PRoW network
- Close vicinity to large population
- Interesting history and interpretation opportunities
- Connected to Londonthopre wood, making a large unbroken area of accessible land.
- Threats:
- Limited car parking close by
- Scrub encroachment on pathways

Factors Causing Change

changes in level of visitor use, scrubbing up of open areas.

Long term Objective (50 years+)

Site will be well used by the local population in particular, enjoying quality and well maintained access facilities.

Short term management Objectives for the plan period (5 years)

Well defined paths, open, safe and easy to use. Cut three times during the growing season to Woodland Trust spec 2.01 (2014) and assessed annually for any additional works which may become necessary, such as coppicing or cutting back encroaching vegetation. Signs and entrances would ideally be replaced and updated during this plan period and to be maintained in "good order" there after.

5.3 Open Ground Habitat

Description

The area comprises a mixture of neutral and calcareous grassland interspersed with damp flushes, ephemeral stream lines and patches of scrub concentrated mainly at the south end and in the northern field. At the south end is a large patch of gorse/ bramble scrub colonised by hawthorn where the young growth is protected. In the northern half of the site the areas of dry grassland are mixed intimately with dense patches of hawthorn and also thistle and nettle patches (which occur on the damper east boundary). The open grass areas are also notable for the large amount of anthills scattered throughout. The area of open grassland on site is approximately 11ha at the present time. One or two older ex- parkland trees are approaching veteran status as growth tails off and these are to be managed along with the parkland trees in adjacent Londonthorpe wood.

Significance

The area provides a good buffer to the mature woodland to the west and gives a graduated and natural intergrade between wooded habitat through scrub to open calcareous grassland. It provides a significant area of semi-natural habitat on the edge of Grantham.

Opportunities & Constraints

Opportunities:

- Good connectivity to the landscape on 3 sides, providing permeability for wildlife Threats:

- Agricultural runoff from the intensive arable system to the east.

- Physical encroachment from the industrial estate to the west as well as litter frequently blown in during windy periods

- Access difficulties for loading and unloading livestock

Factors Causing Change

scrub growth, reduced grazing, woodland encroachment onto the site, lack of stock/machinery access.

Long term Objective (50 years+)

Continue to manage the site as predominantly open ground to preserve the grassland and mobile scrub habitat. Preferably managed through conservation grazing, however mechanical intervention methods will be considered to keep the percentage scrub cover at the desired level. Several individual standards should be retained, ideally at a variety of age ranges and of more than one species appropriate to the location.

Short term management Objectives for the plan period (5 years)

Maintain the current levels of grazing over the plan period in order to maintain scrub levels to between 20% to 30%. Mechanical intervention will be considered following annual inspection by the site manager. Plant several trees within the plan period to become the next generation of infield standards in response to the senescence of existing trees (currently all oak). At least two different species should be used, and individual protection from cattle will be required.

5.4 Connecting People with woods & trees

Description

Londonthorpe Wood consists of 60.6 hectares of native broadleaved woodland, including woodland creation, grass pathways, ponds and open meadow areas which bloom with wild flowers in spring and summer. Alma Park, adjacent to the site, also forms part of the estate.

The wood lies between the industrial north edge of Grantham and the National Trust's Belton Park estate.

The site is part of a project: The Woodland Trust and the National Trust, supported by National Lottery Players through the Heritage Lottery Fund, are working together to reconnect Grantham to its historic landscape. Aiming to link Bellmount with Londonthorpe Wood for the benefit of both people and wildlife.

It is also part of the Woodland Trust's Welcoming Sites Programme; aiming to deliver a consistent level of visitor experience across an extensive suite of our woodland estate.

'Its position in the landscape'

The wood lies to the north east of the town of Grantham in Lincolnshire, abutting the town's industrial estate, surrounding farmland and the National Trust's Belton Park property. The village of Londonthorpe is less than a mile away.

Londonthorpe Wood provides access to woodland for Grantham in an area with low woodland cover. The wood is the closest site to our head offices (located in Grantham), and has the chance to act as our 'shop window' to the people of Grantham.

'General description of the access'

There are 16 public access points around the site from the adjoining roads and tracks. Parking is available at the main entrance just off Londonthorpe Lane. There is currently capacity for 15 cars.

Path networks, with numerous routes to follow around the wood, consist of mown tracks and unmodified earth surfaces, which can be slippery and muddy when wet. The terrain is generally flat to the north of the site, but rises to a steeper gradient leading up to Alma Wood. At this point, footpaths link to the adjacent Alma Park, but due to the terrain, access through may be difficult for some users.

Alma Park is designated open access land under the CROW act.

Lincolnshire County Council has 2 public footpaths that run from the village of Londonthorpe across the north and south of the site.

There is no public transport access to the site, with the closest buses a mile away in the village of Londonthorpe.

The nearest public toilets are 3 miles away on St Peter's Hill, in Grantham town centre, adjacent to the council offices and theatre.

'Specific furniture/ access point description'

There are 16 entrances to site, with varying degrees of access. The entrances are a mixture of kissing gates, squeeze gaps and stiles. Many of the entrances are not user-friendly for disabled

visitors.

There is currently a variety of branded entrance and exit signage at each entrance, and general signage across site. As part of the joint project work will take place to streamline all access points and signage, in particular the access links between the Woodland Trust and National Trust.

'The visitor profile'

There are 20,000 households within the immediate postcode area with 45,000 the population in Grantham.

The site is well used by dog walkers from the local area. As such the visitor profile is likely to be made up predominantly of frequent, repeat visitors.

There is currently consultation happening with the local community as part of the joint project and this will give us a greater idea of the visitor profile and specific user groups.

People counters have been installed across 6 entrances since late 2018, this data collection is ongoing.

Neighbouring Belton estate gets 500,000 visitors a year, with Bellmount seeing around 3,700 visits a month.

Mosaic data (not to be included in MP)

Mosaic data from the surrounding population (focussing on population within NG31) indicates that the top 3 household types are:

Type J - Transient Renters, single people privately renting low cost homes for the short term.

Type I - Family Basics, families with limited resources who have to budget to make ends meet.

Type H - Aspiring Homemakers, younger households settling down in housing priced within their means.

The most predominant group is Grantham is J43 - Renting a room, transient renters of low cost accommodation often within subdivide older properties.

The surrounding community, and subsequently likely our current visitor base, aligns most closely to the following Woodland Trust visitor profiles:

- Older family outings
- Young family outings
- Young independents
- Retirees

These groupings should be considered when planning onsite activity and interpretation.

When planning events or activities to work with the local community it will be important to not focus on income generation, and work to minimise barriers to access.

This mosaic data does not take into account the audience of the large number of visitors that visit Belton House.

'Nearby Woodland Trust sites'

There are 2 Woodland Trust sites within 10 miles of Londonthorpe. These include High Wood, a 12 hectare site with views over surrounding countryside and town of Ancaster. The other site is 10 hectare Sleaford Wood which is a popular wood with the local community.

The National Trust's Belton House is adjacent to Londonthorpe Wood and comprises a country house, formal gardens, large play area and 1300 acre deer park. The site attracts half a million

visitors a year and as such has an established annual visitor offer.

Wyndham Park lies on the banks of the River Witham just to the north of Grantham Town Centre. It offers a wide range of facilities including toddlers play area, sensory garden, riverside walk, skateboard park, bowling green, tennis courts, model boat lake, playing fields, paddling pool and tea rooms. It also holds the Green Flag Award.

'Events and Activities'

There have been a handful of events carried out at Londonthorpe over the past few years; these include a family fun day and dog show.

In 2018 a World War One themed open day was run, which explored the historical links of Londonthorpe and Belton to the first world war. There was a range of family friendly activities and displays on offer. The event tied in with the WT's wider work around FWW woods and was a public launch of the HLF partnership project with NT and associated consultation activity.

In 2019 events will include a series of seasonal bioblitz's, joint WT and NT guided walks series (every 4th walk beginning at Londonthorpe), as well as a summer event TBC. The Mobile Visitor Centre will spend a week at Londonthorpe in June, and with the addition of catering and toilets will act as a visitor hub. Should we be successful in securing funding to move into the delivery phase of the project, an annual events programme will be put in place that caters for a wide range of audiences.

Lincoln orienteering group use the site annually for an event.

'Schools'

There are many schools in nearby Grantham, with the closest to the site being Belton Lane Community Primary and Belmont Community Primary. There is limited access on foot to the main part of the site, although it would be possible to walk from Belmont Community Primary to Alma Park (half a mile).

Currently no schools use the site. However as part of the project an area will be set up as a forest school site that schools will be able to use in a self-led capacity.

'Volunteering'

Volunteers have been associated with Londonthorpe for 10 years. There are currently 20 volunteers associated with this site, who are part of the volunteer woodland working group, who work on site through the Winter.

As part of project new joint WT and NT volunteer roles are being recruited. These include historical researcher and consultation assistant, which are fixed term roles for the duration of the project. As well as longer term roles of wildlife monitors, guided walk leaders, and event assistant.

Significance

There is plenty of historic significance at Londonthorpe. The site once formed part of the 17th century Brownlow estate (this includes the Belton estate) which has fragmented over time. The Brownlow estate sold Londonthorpe wood in 1984.

Londonthorpe and the Belton estate were both used in both World Wars as training camps with the Machine Gun Corps at Bellmount training huge numbers of soldiers. Both Londonthorpe and Alma Park still contain features alluding to their past including a grenade store and shooting range. These features will be surveyed as part of the project.

Alma Park was part of separate country estate (not the Brownlow estate), however the country house was demolished and industrial estate built.

A factor of large significance at Londonthorpe is the HLF project. The National Trust and the Woodland Trust, supported by National Lottery Players through the Heritage Lottery Fund, are working together to reconnect Grantham to its historic landscape. Together the plan is to link Bellmount with Londonthorpe Wood for the benefit of both people and wildlife.

The project has many aims including work to improve wildlife habitats across both sites; this includes introducing conservation grazing and carrying out thinning in the woodland to add structural diversity. The project will explore ways to get people to, around and from the site in an environmentally friendly way, while being as accessible to all user groups as possible. This project will also look at how local people can reap the health benefits of all this green space. The project is currently in the development stage, which finishes at end of 2019. Depending on funding being secured, we will move into a 5 year delivery stage early 2020.

Other significant factors are its proximity to the large population of Grantham, and the opportunity for the site to be the 'shop window' to the Woodland Trust for the people of Grantham.

Opportunities & Constraints

Opportunities

• Joint HLF funded project with the National Trust: Planned infrastructure upgrades, access improvements for local audience, increased volunteers and activities on site.

• Closest WT wood to head office; potential to engage a wide variety of stakeholders, including the Grantham community, with our cause

- Proximity to large local audience in Grantham.
- Access from housing estate into Alma Park.
- Large open space suitable for events.
- Zoning of areas for dog walkers, with one part of site not accessible for dogs.
- Cattle grazing onsite.

Constraints

• Lack of access for disabled groups - no hard surfaced paths. (This will be addressed within the project)

- Lack of public transport to the site, again this will be addressed within green travel plan.
- Issues with dog fouling.
- Site is divided by 2 busy roads with no 'safe' crossing points.

Factors Causing Change

If large local population is tapped into, this increased number of visitors will require significantly improved infrastructure on the site and greater engagement with visitors, volunteers, businesses and community engagement. It will also require a greater level of annual maintenance, with a periodic refurbishment of the entire welcome facilities as well as a higher expectation of the quality of the infrastructure and interpretation provided.

New housing developments proposed locally could also create a significant uplift in visitor numbers.

If we don't get HLF funding project plans will need to be scaled down.

Long term Objective (50 years+)

Entrances and signage will have a welcoming appearance and there will be a network of wellmaintained paths and rides providing a variety of seasonal routes suitable for walkers through varied habitat types, integrated with active woodland management.

Interpretation and waymarking that is fully integrated with, or compliments existing routes and will provide visitors with information on routes and points of interest.

The woodland will provide an extensive area of quiet informal recreation to a wide range of users both from the local community and from further afield.

Awareness of Woodland Trust and the site is high among residents of Grantham and those visiting wider Belton estate.

Londonthorpe will be the go-to woodland destination for population of Grantham, who will feel a sense of connection to the landscape.

The use of the site for education will have increased, with self -led forest schools and other local groups.

The site will have an established events program, with a large annual festival style event to celebrate the landscape and the Woodland Trust.

The landscape will become a much-loved community resource that has real benefits to the lives of local people.

Short term management Objectives for the plan period (5 years)

Access provision will be in keeping with WT access guidelines. Achieved by ensuring that:

• Install up to date and consistent welcome signage at all entrances by 2020 and ensure any difficult access furniture, such as stiles, are replaced.

• Entrances & signage are welcoming to visitors and well cared for (annually).

• All managed paths are kept reasonably well-drained and free from encroaching vegetation and that access infrastructure and boundaries etc. are kept in good order (annually).

• The site is kept safe and welcoming by: repair of vandalism (when needed); clearing of fallen trees where access is obstructed (as needed); and regular site safety surveys (as per risk assessment). Enhanced welcome at all entrances.

The objectives of the project:

• Improve wildlife habitats across both sites, through conservation grazing and re-structuring of woodland plantations at Londonthorpe Wood.

 Looking at ways to get people to, around and from the site in an environmentally friendly way, while being as accessible to all user groups as possible.

• This project will also look at how local people can reap the health benefits of all this green space.

• Deliver a targeted events programme to introduce new audiences to the landscape.

• Deliver an enhanced volunteer programme to increase engagement with the local community.

Improve interpretation across site.

5.5 Open Ground Habitat

Description

Alma Park - The area comprises a mixture of neutral and calcareous grassland interspersed with damp flushes, ephemeral stream lines and patches of scrub concentrated mainly at the south end and in the northern field. At the south end is a large patch of gorse/ bramble scrub colonised by hawthorn where the young growth is protected. In the northern half of the site the areas of dry grassland are mixed intimately with dense patches of hawthorn and also thistle and nettle patches (which occur on the damper east boundary). The open grass areas are also notable for the large amount of anthills scattered throughout. The area of open grassland on site is approximately 11ha at the present time. One or two older ex- parkland trees are approaching veteran status as growth tails off and these are to be managed along with the parkland trees in adjacent Londonthorpe wood. A grazing licence is active on the site, using cattle (through spring and summer) to break up the grass thatch and keep back scrub encroachment.

Significance

The area provides a good buffer to the mature woodland to the west and gives a graduated and natural intergrade between wooded habitat through scrub to open calcareous grassland. It provides a significant area of semi-natural habitat on the edge of Grantham.

Opportunities & Constraints

Opportunities:

- Good connectivity to the landscape on 3 sides, providing permeability for wildlife Threats:

- Agricultural runoff from the intensive arable system to the east.

- Physical encroachment from the industrial estate to the west as well as litter frequently blown in during windy periods

- Access difficulties for loading and unloading livestock

Factors Causing Change

scrub growth, reduced grazing, woodland encroachment onto the site, lack of stock/machinery access.

Long term Objective (50 years+)

Continue to manage the site as predominantly open ground to preserve the grassland and mobile scrub habitat. Preferably managed through conservation grazing, however mechanical intervention methods will be considered to keep the percentage scrub cover at the desired level. Several individual standards should be retained, ideally at a variety of age ranges and of more than one species appropriate to the location.

Short term management Objectives for the plan period (5 years)

Maintain the current levels of grazing over the plan period in order to maintain scrub levels to between 20% to 30% of compartment 5. Mechanical intervention will be considered following annual inspection by the site manager. Plant several trees within the plan period to become the next generation of infield standards in response to the senescence of existing trees (currently all oak). At least two different (additional) spices should be used, and individual protection from cattle will be required.

6.0 WORK PROGRAMME								
Year	Type of Work	Description	Due By					

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	6.96	Ash	1993	High forest	Landscape factors, Legal issues	Connecting People with woods & trees, Informal Public Access, Open Ground Habitat, Secondary Woodland	Area of Landscape Value

Phase III of the planting undertaken at Londonthorpe in 1994/95. This area is more open than the previous two phases and almost a third is scattered in small blocks through the large areas of open grassland that dominate in this compartment. The species planted are oak, ash, rowan and birch with a scattering of woody shrubs and minor broadleaved species including several fruit trees (apple, pear and cherry) One veteran ash exists on the roadside in the south west corner. The soils in this compartment area appear to be dryer and less fertile than the rest of the site, therefore growth and development has been correspondingly slower. This compartment holds the car parking area for the site which was improved in 2003 with new post and rail fencing and the roadside hedge laying to reduce the extent of unauthorised dumping and anti-social behaviour which was previously prevalent, and is still occasional. The proximity to the car park and large areas of open space make this compartment very popular with Dog walkers, who make up 98% of the user base in 2012.

Large open grassland areas left unplanted for landscaping, amenity and habitat diversity reasons; integrating the woodland creation site with the adjacent Belton Park (National Trust). These meadow areas are very popular with dog walkers. The extent of dog walking concentrated in this area has led to problems with the amount of dog mess left on site to the detriment of usage by other groups. Now the trees are becoming well established in this compartment and the planting outline is apparent in the landscape. Managed on a 2 year cutting rotation (since 2012) to prevent vegetation succession, un-mown areas contain natural regeneration and areas of scrub. Small patches of scrub and a scattering of infield standards is desirable, but these areas should not be allowed to become too prolific.

The area holds three veteran trees (one oak and two ash) within the open areas which are relics of the parkland landscape. These require special consideration when planning management activity. One old ephemeral pond exists on the northern boundary.

In 2007 an area of "forest of flowers" meadow creation was completed, with deep ploughing and sowing of a mixture of annuals and perennial meadow species. While initially stunning, many of the annual species have disappeared. This makes the area look quite bare at times, and a more natural hay meadow with wild flowers would be more aesthetically pleasing and provide better opportunities for wildlife. Although high disturbance from dogs is a significant constraint.

2a	25.17	Oak (pedunc ulate)	1992	High forest	Landscape factors, Legal issues, Mostly wet ground/exposed site, No/poor vehicular access within the site	Connecting People with woods & trees, Informal Public Access, Open Ground Habitat, Secondary Woodland	Area of Landscape Value

phase I of the Londonthorpe planting carried out in 1993, consisting of a mix of oak, ash, birch, field maple, sweet chestnut, rowan with some small glades of yew and patches of shrubs along the rides. The compartment, planted on the scarp slope up to the Alma Wood area, contains 4.2 ha of open space which encompass electricity wayleaves and open woodland rides. The planting is now very well established, with closed canopy and a top height of around 6-7 meters in 2013. Although not as busy as the area on the lower ground, it is still a very popular site and good views can be obtained from the top of the hill looking north east across Belton Park. An area of open ground has been left to maintain this view indefinitely.

The area contains nine veteran trees (oaks and ash) which are relics from old hedgerows rather than open parkland trees that are found below. Management will take these trees carefully into consideration.

The lane on the north east boundary was frequently used for fly tipping. Although not in our ownership the owner of the lane (adjacent farmer) agreed that we could gate it off in 2005. The fly tipping problem has ceased.

The woodland is bounded on the upper edge by cpt 4 -Alma Wood - and the two are now integrating well.

За	6.72	Ash	1995	High forest	issues	People with woods & trees, Informal Public Access, Open Ground	Area of Landscape Value
						Habitat, Secondary Woodland	

Phase II of the planting at Londonthorpe carried out in quarter 1 1994. The species are the same mixture as the other phases: mostly oak and ash with field maple, birch, rowan, sweet chestnut, and a wide range of native shrub spp. The soils in this area are richer/more moist than in 1A and growth has been correspondingly better. This subcpt is intimately mixed with large areas of open space -3B. It contains 5 veteran trees in the old hedgerow that bisects north/south and one open park tree, again all oak and ash . One or two of these are little more than stumps with secondary growth, but represent good deadwood habitat, contain hollows and areas of rot. Management of the site will preserve these old parkland relics, together with the old hedge-line so that its species can in time colonise the surrounding woodland area. As the wood establishes, this area has produced a great deal of natural regeneration of ash and hedgerow species which are now blurring the distinction between planted and open areas nicely. Some interesting successional habitats are emerging. In 2006 an additional area of planting was carried out by central office staff members.

3b	6.66	NULL	Non-wood habitat	Landscape factors, Legal issues	Connecting People with woods & trees, Informal Public Access, Open Ground Habitat, Secondary Woodland	Area of Landscape Value

Large open grassland areas left as unplanted, mainly for landscaping reasons: to integrate the woodland creation site with the adjacent Belton Park (National Trust). The large areas of open space are cut on a 2 year rotation to prevent vegetation succession, but with patches of scrub and occasional self-set infield trees retained for added interest. A "forest of flowers" area was created in 2007 in the North West corner of the compartment, which is cut annually. Sedge and goat willow regen are creeping in to the wetter areas of this.

The paths through are cut regularly and the area is well used. A small area of planting was carried out by central office staff in spring 2006.

The area holds five veteran trees - which are relics of the previous parkland landscape. These require special consideration when planning management activity.

A pond was dug at the northern boundary at the time of planting but this has become dried up and a fairly ephemeral wetland feature over the years.

All over the sub compartment natural regeneration of ash and hedgerow species is burring the distinction between planted areas and open ground

4a	4.00	Sycamor	1856	High forest	Landscape	Connecting	Area of
		e			factors, Legal		Landscape Value
					issues, No/poor	woods & trees,	
					vehicular access	Informal Public	
					within the site,	Access, Open	
					People issues	Ground	
					(+tve & -tve), Site	Habitat,	
					structure,	Secondary	
					location, natural	Woodland	
					features &		
					vegetation		

An area of mature woodland on top of the scarp slope known locally as "Alma Wood". Believed to be have been planted in the mid-1850s following the battle of Alma in the Crimean War which took place 20th September 1854. The woodland is an intimate mixture of typical parkland landscaping species - beech, sycamore, horse chestnut, oak, sweet chestnut and ash with a few natural colonisers - field maple and birch. Based on an old hedge line the wood has since been colonised by a variety of native woodland plants such as dogs mercury, wood anemone, wood dock, enchanter's nightshade and cuckoo pint which in some places gives the wood flora an ancient woodland feel. Given a long period of under management, its exposed position and age , the wood has suffered considerably from storm damage in recent decades and a large amount of deadwood habitat has been produced which is rare in the area. A large amount of standing deadwood is also developing naturally as a result of tree senescence: ranging from branch death and internal cavities to whole dead trees. There is fine balance between managing tree safety above the well-used path, retaining over mature standards and deadwood habitat for a long as possible.

The wood on the whole appears very robust, despite a relatively narrow age range, and previous canopy gaps have rapidly filled with regeneration which appears to be mostly ash and sycamore but also with some oak and beech.

An area of open rough pasture donated to the Trust in 1993 by South Kesteven District Council for the purpose originally of tree planting and public access provision. Due to its high conservation interest, the area has since been managed as open grassland and scrub under a Countryside Stewardship Scheme which encompassed hedge planting, fencing of the site, the removal of eyesore structures and the establishment of a grazing regime to maintain a varied sward and keep back scrub encroachment. Grazing the site is difficult due to its location, without proper made up access for stock, and the occaisional problems with vandalism. The area adjoins the Trust's Londonthorpe Wood to the north.

The area comprises a mixture of neutral and calcareous grassland interspersed with damp flushes, ephemeral stream lines and patches of scrub concentrated mainly at the south end and in the northern field. At the south end is a large patch of gorse/ bramble scrub colonised by hawthorn where the young growth is protected. In the northern half of the site, seperated off by a newly established hedgeline the areas of dry grassland are mixed intimately with dense patches of hawthorn and also thistle and nettle patches (which occur on the damper east boundary). There are many anthills scattered all over the site and the pockets of scrub and successional habitat make it good for insect life. The area of open grassland on site is curently approximately 11 ha. One or two older ex- parkland trees are approaching veteran status as growth tails off and these are to be managed along with the parkland trees in adjacent Londonthorpe wood.

The site was previously used as a rifle range but almost all structures have since been removed leaving a couple of retaining walls which are currently in a reasonable condition.

Due to its position next to the housing estates on the north side of Grantham, the area is heavily used for recreation by loca people.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	2a	Thin	20.00	25	500

GLOSSARY

Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

Ancient Woodland Site

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

Beating Up

Replacing any newly planted trees that have died in the first few years after planting.

Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

Clearfell

Felling of all trees within a defined area.

Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

Continuous Cover forestry

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

Native Species

Species that arrived in Britain without human assistance.

Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

Re-Stocking

Re-planting an area of woodland, after it has been felled.

Shrub Layer

Formed by woody plants 1-10m tall.

Silviculture

The growing and care of trees in woodlands.

Stand

Trees of one type or species, grouped together within a woodland.

Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

Tubex or Grow or Tuley Tubes

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.

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