



Fordham Hall Estate

Management Plan 2017-2022

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) 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 www.woodlandtrust.org.uk. 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.
4. 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:	Fordham Hall Estate
Location:	Fordham, nr Colchester
Grid reference:	TL923284, OS 1:50,000 Sheet No. 168
Area:	204.96 hectares (506.47 acres)
Designations:	Conservation Area, NULL, Site of Local Nature Conservation Importance

2.0 SITE DESCRIPTION

2.1 Summary Description

A gift from an anonymous donor, the Fordham Hall Estate is eastern England's largest woodland creation site. Around a quarter of a million trees have been planted alongside the meandering River Colne on what was once arable farmland. Alongside young woodland there are also flower-rich meadows, which are awash with colour during the summer months.

2.2 Extended Description

Ownership

Fordham Hall Estate is owned by the Fordham Farm Trust and was donated under a leasehold agreement to the Woodland Trust in October 2002 for a minimum of 99 years.

Location

Fordham Hall Estate covers an area of approximately 200 ha (505 acres) on the northern side of the river Colne, to the northwest of Colchester, Essex. The Colne Valley is a primarily agricultural landscape, with significant amounts of pasture, especially between Colchester and Earls Colne. Upstream of Earls Colne the emphasis is more on arable cultivation. Fordham Parish itself has very little woodland but elsewhere in the valley there are a large number of small woods and three

notable concentrations: the Marks Hall complex, Chalkney Wood and the Broaks/Shardlowes.

Soils and Geology

The Estate is located on flat and gently sloping land along the southern margin of glacial drift that overlies London clay at depth. The estate is orientated mainly in a north-south direction and the various fields occupy all levels of the valley from the flood meadows adjacent to the river as far as the flat plateau at high level. For the size of the site the geology is relatively diverse. The majority of the soils are developed on either moderately heavy glacial boulder clay drift or sandy river terrace deposits laid down within the last 50,000 years. However the River Colne cuts through London clay laid down in the Tertiary period, approximately 50-60 million years ago, and this deeper clay can be identified in the subsoil of much of the land on the plateau and even outcrops at the surface in one field to the south-east of the reservoir. Ten different soils series have been identified across the site (ADAS 2003). Broadly speaking most of the soil types will support W8 woodland types with some smaller areas of W10 on the lighter more acidic soils that occur across the site. The tendency to spring and winter water logging of some on the more clayey types, supports the creation of local woodland types such as plateau alderwood.

Average annual rainfall: 557mm

Historical Management

A feature of the site is that virtually the whole area has been under arable cultivation for some centuries. The Chapman and André map of 1777, shows the lack of woodland or other habitats at that time. The 1840 Tythe map shows the estate area to have been primarily an arable landscape, although most of the fields were considerably smaller and consequently there was a much greater length of hedgerows. There were a small number of pastures and one area, the Grove, is shown as wood pasture. All of these have now gone, replaced by arable that in recent years has grown a wide range of arable crops including cereals, oilseed rape, beans, potatoes and sugar beet.

Along the northern bank of the river were meadows, one of which was called Woolpit Meadow, and they are shown as divided up into strips each owned by a different person. This indicates seasonally inundated and therefore highly productive hay meadows owned and managed by various members of the local community. It can be assumed that the management of these meadows had been similar for many years and that the resulting grassland would have been particularly species rich. The former Woolpit Meadow is now the location of a small area of marsh that has developed into a botanically rich and diverse meadow following the abandoning of farming in the field in 1997 and was designated a County Wildlife Site in 2009.

Since acquisition by the Woodland Trust approximately 300 acres has been planted to new native woodland in a five year phased programme. 150 acres has been converted to grassland by a combination of techniques including wildflower sowing and hay translocation. In Q4 2009 much of the river valley was enclosed and the infrastructure installed to allow grazing to take place across the site. In 2006 small scale grazing was initiated on the floodplain fields with Soay sheep, from a local farmer, being grazed late in the summer each year since.

Conservation Features

While arable farmland make up the majority of the site, on acquisition there were a number of significant natural features on the site that form a backbone on which a conservation plan can be built. Features of note are:

Existing hedgerows: There are around 15 km of hedgerows across the site varying from close clipped hedges to rambling linear copses containing 41 different woody species and climbers. A number of these are clearly ancient with one, at least, from map evidence the remnant of an Ancient Semi-Natural Woodland (ASNW) has been reduced to a hedge over the last 200 years. Hedgerow trees are a common but not abundant feature along the hedges.

River Colne: Approximately 1.97 km of the site bounds onto the river Colne. While for a lowland river the Colne is relatively clean, levels of nutrients (especially Phosphorous) are high. The river has moderately good fish populations and Otters are resident along it but Water Voles became extinct or at least very rare as a result of predation by mink that were frequently found along the valley. More recently (approx 2010) Essex Wildlife Trust undertook a water vole reintroduction programme and a successful population of water voles is now established along lengths of the river. Associated mink monitoring and control has also been an essential part of this success.

Floodplain: Approximately 8 ha of land adjacent to the River Colne is susceptible to flooding in winter. One area has already developed into marshland with local and regionally uncommon plants and birds since arable management was abandoned in 1997. Research in 2003 demonstrated that while the soils are suitable for wetland development, problems over water quality mean that the range of habitat creation options are limited without very considerable extra expense to import water onto the site.

Proximity to Ancient Semi-Natural Woodland (ASNW): The estate is situated amidst a lesser cluster of ASNW's with one small (<2ha) ASNW (Rectory Wood) immediately adjacent and two other larger woods Fiddlers Wood and Hillhouse Wood within a 100m and 400m respectively of the site. Hoe Wood, which is within a 2km of the site and Hillhouse Wood, are both owned and managed by the Woodland Trust. The site also abuts a small valley alder carr on a minor tributary of the Colne on the west of the site.

Cricket Bat Willow stands: There are two mature cricket bat willow stands on the site, one alongside the river Colne and one alongside one of the mapped streams on the site. The two stands are the only 'mature woodland' on the site and are well located for hosting bat and bird boxes and also as possible Otter holts.

Mapped streams: Two mapped streams run through the site and another that touches the north-western boundary of the site in one short section. There are also a number of permanent and seasonal ponds over the site with the soil conditions in many parts predisposed to seasonal water logging offering opportunities for further seasonal pond creation. Nutrient levels in the streams were tested in 2003 and found to be acceptable for use as high quality wetland and pond habitats.

Off-site opportunities: The river valley context of the estate, the close proximity of the two Woodland Trust owned woods as well as other ASNW, and the need to manage deer and mink at a landscape level, highlights the desirability that some aspects of conservation management on a wider landscape scale, and including other landowners, could be considered. Key opportunities to investigate are the potential of integrating river corridor management with landowners on the

southern bank of the Colne, including bat conservation work through the creation of hibernacula in WWII bunkers.

Access

The site is crisscrossed by 10.5km of PROW with as many again permissive footpaths. Horse riding has been allowed on a network of permissive bridleways operating within the auspices of the East Anglian Toll Ride scheme.

Archaeology

Surveys from when the Woodland Trust initially took on management of the site indicated that there had been a Roman presence on the site and particularly on the lower slopes of the Colne Valley. Additional geophysical and remote sensing surveys in 2013 indicated that a higher level of archaeological research was required to fully interpret the initial findings. These began in summer 2015 and are anticipated to continue until Autumn 2016. In addition, a fine example of a polished stone axe head was discovered in the field north of Ponders Road during field walking survey by archaeologists prior to the initial tree planting.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus:

The nearest bus stop is at the War Memorial in Fordham. The bus (88A) journey to Colchester takes 29 minutes. For further information on public transport, contact Traveline on 0871 200 2233 or visit traveline.org.uk

By train:

Colchester station is located to the north of the town off Turner Road. It is about three miles (5km) from Fordham Hall Estate. For further information on public transport, contact Traveline on 0871 200 2233 or visit traveline.org.uk

By car:

The village of Fordham is at the centre of Fordham Hall Estate and is approximately six miles (10km) away from Colchester. From Colchester go west on the A133 and then join the A12 westbound. Leave the A12 at Junction 26 and take the A1124 exit to Halstead/Stanway.

At the top of the ramp, take the third exit off the roundabout onto the A1124. Continue on along the A1124 for about a mile (1.6km). At Eight Ash Green, the road bends sharply right and then left.

Immediately after the second bend go right onto Wood Lane, which is signposted to Fordham, and then go left onto Fiddlers Hill. Continue on along Fiddlers Hill for one and a half miles (2.4km) to Fordham.

At the village pass the school on your right and keep driving until you see the post office and shop. There turn left to find the Trust's car park close by on the right. The car park has space for 15 cars.

3.2 Access / Walks

A network of 12 miles (19km) of unsurfaced paths allows visitors to explore the estate. The paths are cut regularly but can be muddy and slippery after rain, especially during winter.

The estate's paths are popular with walkers (dogs are welcome), cyclists and horse-riders. Horse riding is allowed on a network of permissive bridleways that are part of the East Anglian Toll Ride scheme.

There are no waymarked trails at present. The estate does not have a single main entrance and it can be accessed using its network of paths.

Public rights of way crisscross Fordham Hall Estate. They include a section of the Essex Way, an 82 mile (132km) walking trail through the county from Epping to Harwich. The trail passes through the estate's cricket bat willow. For details of the route visit essexway.org.uk

4.0 LONG TERM POLICY

The long term policies for the site fall within three broad categories:

1. The establishment of a new native woodland
2. The creation or enhancement of non-woodland habitats (riparian conservation grassland, wild flower meadows, community orchard, hedgerows and a matrix of wetland habitats (the river Colne, river banks, ponds, streams, ditches, marshland and seasonal wetlands)
3. Encouraging and developing public access

1. New native woodland

The establishment of a large native woodland comprised of stand-types that would be typical of the site. Subsequent management to reflect the most appropriate approaches within the wider landscape context with emphasis on reinforcing links to nearby ASNW's and other semi-natural habitats. The new woodland will be made up of six different stand types based on Rackham (1980) and Rodwell and Patterson (1994). Where each stand type is laid out is based on site topography and soil type. All shrub species will be derived from colonisation from the 15 km of hedgerows, except for Hazel, which will be planted as part of the woodland matrix. The six stand types being planted are:

- Ash-Hazel Woodland (NVC Type W8)
- Hornbeam-Ash woodland (Ex NVC)
- W8 Ash-Maple-Dogs Mercury
- W10 Quercus robur-Bracken-Bramble
- Lime-Hornbeam (NVC W8/W10 variant)
- Plateau Alderwood (Ex NVC)

The aim is to ensure establishment of the planted woodland blocks and to develop them towards mature secondary native woodland, which is resilient to change. This will be done by ensuring a diverse range of native tree species as possible. Management of the woodlands will respond to any changes and threats imposed on them, for instance from tree diseases. Restocking and the use of alternative species to ensure a robust and diverse tree mix will be undertaken where appropriate, and especially in areas affected by ash dieback.

The northernmost block of Sub-Compartment 1A lies adjacent to a former ASNW that remains as a hedge and the compartment was planted with 100% Sessile Oak in 2004. Pedunculate Oak was the intended species however the larger part of the site was planted by the Forestry Commission Technical Development Branch and they used the wrong species. Subsequent management will favour increased woody species diversity from colonisation by plants within the peripheral hedges and small ASNW. Similarly some 5 ha of land was left to colonisation due to its close proximity to other important woodland features, namely;

- Compartment 1A: 1.26 ha block adjacent to a hedge that is the remnant of an ASNW cleared c 100 years ago.

- Compartment 1A: 1.84 ha adjacent to small stream and valley Alder Carr and comprises the bottom and slopes of a small valley;
- Compartment 1B: 1.68 ha adjacent to an ancient hedgerow with the area concerned having a natural depression.

However the slowness of colonisation and the need for land to plant trees on led to these areas being planted in 2007 and 2008.

Under the terms of the leasehold agreement three fields (sub-compartments 3a & 3b) totalling 16.9 ha have to be retained in an undeveloped state for the next 25 years. All three fields are adjacent to the village with extensive public access and are isolated from the main grassland blocks but are adjacent to woodland creation blocks. The long-term aim for these fields is to establish woodland on them but whilst either waiting until the 25 year period has elapsed or the freeholder assents to their earlier planting. In the interim period it is proposed that these three fields are farmed under a low-input arable system. A fourth field (sub-compartment 3d, 4.1ha) has been divided so part can develop into a community managed traditional orchard, a separate field allowed to be established as a community wildflower meadow and the remaining section farmed as arable until such time as its future is confirmed (restricted due to wayleave requirements from the 2010/11 installed water main).

2. The creation or enhancement of non-woodland habitats

Hedgerows

Existing hedgerows will be managed in a number of ways depending on their condition and location. The following general guidelines apply:

- Hedges adjacent to roads will have their top and the roadside edge cut annually in February;
- Field side of hedges will generally be left to develop naturally unless there is a path or track beside it or under the terms of the lease it requires maintain as a hedge. Where the field edge needs to be cut then this will usually be done in a manner that promotes the hedges' thickening out;
- Hedges within woodland blocks will be left to develop naturally into woodland;

New Conservation Grassland

The non-woodland fields along the lower valley were sown to two grassland mixes. The eastern block was sown to a conservation mix while the western block was sown to a grass/nectar mix. Subsequently hay from the car park meadow is being spread on the meadow to increase the spread of different local species, especially yellow rattle. Fencing, cattle handling pens and water troughs were erected in Q4 2009.

Land adjacent to the car park was initially sown to grass in 2003 and then subsequently hay from a local meadow was scattered across the site, left for a few days and then collected up. In 2009 this resulted in a spectacular show of wildflowers including a number of County rare records. Through grazing and hay cutting in the first instance we will work to encourage a floristically diverse sward. Ultimately the intention is that open ground will be grazed extensively for up to 12 months of the year.

Two minor streams flow through the grassland areas. In 2012 an on-line pond was established to

both allow a section for cattle watering and a larger area given over to the creation of an additional wetland habitat.

Floodplain and River

The two areas of low-lying land within the floodplain were enclosed for grazing in 2006. The river bank along the eastern-most block had substantial reprofiling undertaken in 2007 to encourage bankside vegetation. In the long term it is intended that existing streams could be redirected to maximise opportunities for wetland creation with new ditches and foot drains constructed to increase water storage and distribution on marshland areas. Opportunities to promote flooding of the fields as well as to encourage fish conservation will be undertaken in line with Environment Agency advice.

Cricket Bat Willow Plantations

The river valley Cricket Bat willow stands were heavily thinned in 2007. The intention is to leave the remaining trees to grow and senesce naturally and to form natural floodplain woodland, a mix of alder and willow with some Downy birch. Away from the River Colne there is a single stand of Cricket Bat Willows which will be retained as a commercial stand and silvicultural management of this stand will be undertaken (felling and replanting) periodically to ensure the commercial cycle is continued.

Habitat enhancement features

Habitat enhancement features are to be developed across the site to expand and bring forward the biodiversity benefits of the habitat creation work both on and off-site. Work to be targeted at actions to benefit key species, typically BAP species, and to be monitored to see what impact the actions have. Key actions identified are:

- Early establishment of deadwood habitat to benefit invertebrates, reptiles and amphibians;
- Use of cover crops in temporary open ground areas and field margins to provide seed and nectar sources for butterflies, bees, and farmland birds.
- A wide range of bird boxes to be used extensively across the site.
- Creation of bare earth/sand invertebrate banks;
- Pond creation, including seasonal ponds, and enhancement of existing pond and ditch habitats to benefit amphibians and to extend wetland habitats.
- Works to promote reptile and amphibian conservation.
- Otter run on the road bridges crossing the river Colne;
- Artificial otter holt and other scrubby 'resting' areas developed along the river side;
- A number of bat conservation measure including roosting and hibernation boxes and possible conversion of off-site WWII pillboxes to bat hibernacula;

Offsite Conservation Impacts

Working with local partners we will seek to use the project at Fordham Hall Estate to encourage wider conservation gains at the landscape level and also work with neighbours to mitigate any potential problems that may arise on their land as a consequence of the Fordham Hall Project.

In particular in the long term we hope to have:

- Established a working relationship with landowning neighbours over the management of problem and pest species, in particular: Deer, Rabbits, and Mink
- Agreed an integrated conservation vision on management of the river and river corridor with neighbours;
- Encouraged and supported neighbours with woodland creation projects, especially which help to link and buffer local ASNW's.

3. Permitting and encouraging public access

The long term policy is to maintain and develop open public access across the whole site and where practical remove as much internal rabbit fencing as feasible so as to allow as great a degree of freedom of movement for visitors as possible. For health and safety reasons stock fencing will be maintained where required, to assist with management of open habitats. Visitor facilities will be maintained to a good standard overall and there will continue to be an extensive network of well managed paths across the whole of the site. All site infrastructure such as gates and bridges will be inspected routinely and will be maintained to a good standard.

Bridleway Provision

Horseriding and cycling will be permitted across the site on a permissive basis based on existing agreements with the East Anglian Toll Ride and through a voluntary user code of practice. Where restrictions to use are shown to be necessary or where entrances are considered unsafe for bridleway use then restrictions through fencing/signage will be used. However as a general rule we are seeking to avoid further fencing over and above that required for the initial woodland creation and grazing.

Pedestrian/cycle provision

In addition to maintaining the existing PROW the permissive path network will establish a number of safe unsurfaced pedestrian/cycle routes alongside roads.

Car park and site access

The maintenance of Woodland Trust car park for up to 15 cars at the site (with an additional bus parking area) will be one of the primary access gateways onto the site. The car park will have height restriction barrier to prevent larger vans and vehicles from entering the site and maintaining the ability to close/lock the car park should it be decided that daily closing is desirable. If and when the car park is locked a key for community use will be made available. Overall the car park will act as the main gateway to the site however there will be a number of minor gateways that will have added information for the community.

The 2015 issues of travellers accessing a neighbouring property necessitated an increase in security arrangements and various new gates, ditches and banks have been created. In addition, the on-going issue of green waste fly-tipping at various remote access points has suggested that physical barriers at entrances may regrettably be a longer term solution to both issues.

Site Information and interpretation

Site information will be available at main gateways however the main thrust of site information and interpretation provision will be internet based. Non web users will however have access to information at information points at the main entrances. Signage and on-site visitor information will be reviewed and updated periodically to ensure it is current, relevant and good quality.

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 Informal Public Access

Description

Fordham is distinctive in public access terms in that it virtually encloses the village of Fordham, home to circa 900 people. A further 162 000 people live within 5 kilometres of the site, mainly to the east in England's oldest recorded town, Colchester. There is an extensive public right of way network across the site, including the long-distance footpath The Essex Way. The PRoW were well used along with a number of permissive routes prior to the WT acquisition. There are no public bridleways but there has been a long history of permissive use through the East Anglia Toll Ride Scheme. The Garrison Stable relocated to an adjacent farm in 2006 which has increased the use of the site by horse riders.

A working group of local people prepared a plan of the key designated and permissive paths around which the woodland creation has been designed to ensure barrier free access.

Prior to submitting a woodland grant scheme application an Environmental Impact Assessment was undertaken. A key category for consideration was the impacts on the local community, including impacts of increased visitor access, of the project. The consultees during the scoping phase identified the diverse impacts of the project on the local community as the most significant issue to be considered during the EIA. These impacts are both positive and negative in nature and many of them are subjective (the same impact may be viewed as positive or negative by different individuals within the village). The key impacts on the local community identified are summarised below:

- Reduction in views from key viewpoints and individual properties:
- Increased number of places to walk and locations for informal recreation. Improved links between Fordham and Fordstreet.
- Increased support for village services and businesses (shop, pubs).
- Parking in the village is already extremely limited and increased visitors in the long run will exacerbate this problem.
- The project is seen by many local people as a means of preventing the expansion / urbanisation of the village.
- Landscape change around the village is also seen by some as a negative change, particularly due to the slow loss of the "open" feel of the village
- Increased opportunities to get more involved in the land through acting as a warden, or playing a role in establishing the village orchard

A key concern was the lack of parking for visitors. In the first instance it was hoped a newly built car park at the Fordham Primary School could be used for visitors, but this did not prove to be possible. The provision of parking for up to 15 cars was also a key condition of the Community Woodland Supplement of the Woodland Grant scheme and consequently a car park was constructed at the site with provision for 15 cars and a bus. To allay fears about possible misuse the entrance has a relatively low height barrier, eg 4 x 4's are unlikely to get in along with Transit Vans.

A PhD studentship was sponsored at University of Essex looking at the impact of a landscape scale conservation project on local people.

As part of the fundraising package there was a substantial woodland creation area set aside for various tree sponsorship schemes. During the development phase and as Woodland Trust's Tree 4 All campaign, up to 1000 children from local schools planted trees as part of a structured education package.

Significance

In almost completely enclosing the village of Fordham, Fordham Hall Estate is especially prominently located in terms of the local people. Added to this is the long distance footpath, the Essex Way that passes through the site and several local circular walks promoted by the Colne Valley Countryside Project.

There are no public bridleways within a number of local parishes including Fordham and the proposal will greatly improve local provision with scope to integrate with permissive routes elsewhere. The project also tests the practicalities for the Trust of using an existing toll ride scheme to maintain some control over the number of horses utilising the site.

Opportunities & Constraints

C1: A number of dangerous road crossings restrict easy and safe movement across the site.

C2: Livestock grazing could restrict accessibility for some users apprehensive of sharing paths with livestock.

C3: Actual or perceived fear of misuse of the site by travellers, fly-tippers and joyriders has been regularly expressed as a concern by residents.

C4: Permissive bridleways could become boggy in winter months.

O1: Considerable local commitment, knowledge and experience to the Fordham Hall Estate Project that can be drawn upon to better manage the site.

O2: Opportunity to test use of an existing toll ride scheme to maintain some control over the number of horses utilising the site.

O3: To improve the value of the site for educational purposes.

O4: To create an exciting hub within the wider access network.

Factors Causing Change

Fly tipping, unauthorised motorcycle use, threat of travellers accessing the site, greater than predicted increased use by riders and/or cyclists

Long term Objective (50 years+)

To provide a safe, freely available and enjoyable countryside experience for local people and visitors from a wide catchment. Visitor facilities will be maintained to a good standard overall and there will continue to be an extensive network of well managed paths across the whole of the site. All site infrastructure such as gates and bridges will be inspected routinely and will be maintained to a good standard. Signage and on-site visitor information will be reviewed and updated periodically to ensure it is current, relevant and good quality. Site information and interpretation will also be available online and integrated with existing community measures, such as the Fordham Village Newsletter.

Work with local people to establish a volunteer support group, if sufficient interest arises from the community.

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

Annual management of main paths so as to maintain a short grassy surface through five cuts per year and a single hedge trim each year in February. All entrances will be routinely cut back during the growing season and monthly litter pick of the car park will be undertaken.

Site information will be updated and reviewed at the three main entrances (site car park, opposite Three Horseshoes Pub, and adjacent to the Shoulder of Mutton Pub) and this will be linked to Internet based site interpretation. Ongoing and routine updating of general signage and visitor facilities will be undertaken, including in 2018 a maintenance programme on all the gates, bridges and other structures.

Riding policy and practice agreed and maintained with the East Anglian Toll Ride scheme (established 2010).

Work with local people to develop a volunteer support group, if sustainable interest arises

Increase the open access provision and seamless merging of habitats by implement a phased programme of rabbit fencing removal around woodland creation areas where no longer required (2018 - 2020)

5.2 New Native Woodland

Description

Following landscape and archaeological assessments 112.54 ha of land was identified as available to establish as new native woodland. A further 16.9 ha is potentially available once leasehold restrictions lapse, 25 years from the inception of the leasehold agreement (i.e. 2027).

Much of the land available for woodland creation is on the plateau immediately around the village of Fordham, although, there is one block of woodland that runs from the valley bottom up to the plateau (sub cmpt 1d).

In a four year phased planting programme woodland was established on the 112.54 ha. Approximately 12 ha of the gross planting area is open ground as this is largely made up of a 50m wide ride along the line of a eastern gas main, western water main and other minor areas left unplanted due to other smaller wayleaves or PROW/other permissive paths.

Key tree species of six different stand types identified as appropriate for the site were planted. No shrub species were planted, apart from hazel, as these will arise naturally from the 15km of hedgerows on the site. Within each stand-type oak and ash are generally present in sufficient abundance to meet potential timber production as well as conservation objectives. Other species are present in sufficient abundance so that whatever silvicultural system is adopted a diverse woodland stand-type will be established.

All trees were planted at 2.1x 2.1m spacing in long curved rows. All planted areas were pre-sown with a fescue dominated grass mix and the planting area subsoiled at 2.1m intervals to break up any plough pan and to mark out the planting rows.

Rabbit protection was by fencing except for small areas protected by tree-shelters due to site design issues. Deer were assessed as not a significant concern at the start which has proved to be the case although all four common deer have been seen to increase. Historic attempts to form a Deer Management Group with the Deer Initiative have not yet been successful.

Significance

Increasing the area under native trees and improving woodland biodiversity are corporate objectives of the Woodland Trust and in the Government response to Independent Panel on Forestry Report (January 2013) they have agreed that:

"England's trees, woods and forests are a vital national asset providing multiple economic, social and environmental benefits. To achieve this, everything we do must be focused on achieving the following key objectives, in priority order: Protecting the nation's trees, woodlands and forests from increasing threats such as pests, diseases and climate change; Improving their resilience to these threats and their contribution to economic growth, people's lives and nature; and Expanding them to increase further their economic, social and environmental value."

The range of habitats for native flora and fauna created by establishing native trees provides a valuable refuge, especially in this part of Essex which is dominated by large, intensively managed farms.

There is the potential for improving the wildlife value of the area as a whole by linking Fordham Hall Estate to other habitats of wildlife value, via a network of hedges, headlands and woodlands.

Opportunities to restore floodplain Cricket Bat Willow woodland areas to a wet woodland type are rare in this area and can provide great benefit to otters and Water voles that are presently recolonising the River Colne.

Opportunities & Constraints

Constraints

- C1: Unrestricted deer browsing
- C2: Unrestricted rabbit grazing
- C3: Need to retain key views
- C4: Archaeological conservation needs
- C5: FWPS precludes coppicing/grazing within the 15 year FWPS period
- C6: Leasehold arrangements
- C7: Ash die back present on site

Opportunities

- O1: To increase capacity of a significant area for native woodland plants and animals
- O2: To expand habitat opportunities for non-woodland species
- O3: To expand the area of native woody species
- O4: To engage local residents in woodland management

Factors Causing Change

Deer damage, rabbit damage, Ash die back

Long term Objective (50 years+)

The aim is to ensure establishment of the planted woodland blocks and to develop them towards mature secondary native woodland, which is resilient to change. This will be done by ensuring a diverse range of native tree species as possible. Management of the woodlands will respond to any changes and threats imposed on them, for instance from tree diseases. Restocking and the use of alternative species to ensure a robust and diverse tree mix will be undertaken where appropriate, and especially in areas affected by ash dieback. Long term woodland creation on 16.9 ha of arable land under leasehold commitment to not develop until 2027. Develop a mature community Orchard established with the leadership from and maintained by local residents. The continued commercial management of a stand of cricket bat willows, which will be used for educational purposes.

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

Establish 85ha of new native broadleaved woodland. Stand types and their species composition to be based on the work of Rodwell and Patterson (1994) and Rackham (1980). During 2018 and 2019 a large scale beating up (restocking) programme will be carried out in areas of new woodland which are struggling to establish (eg. through disease or other factors). Approximately 14 hectares will be restocked with the most appropriate and robust species mix including common alder, downy birch, field maple, goat willow, oak and rowan. Subsequent weed control will then be carried throughout the rest of this management period to ensure establishment of these trees.

Implement a phased programme of deadwood habitat creation through the construction of 'stag beetle pyramids' across the site. Establish two stacks per year in the more mature woodland areas (initially sub cmt 1a) for first five years on new woodland edges ideally on the field side of established hedges. (2017 - 2022).

There will also be a phased removal of rabbit fences and tree shelters over the entire plan period, as the infrastructure and materials become redundant and not needed.

Undertake silvicultural management of the stand of cricket bat willows (approx 3 hectares) in the southeast corner of the site, to continue the commercial cycle and educational interest. The operation is provisionally planned for 2019 but this date may be altered due to market circumstances. A number of dead and senescing trees will be retained in the area for conservation benefit.

5.3 Semi Natural Open Ground Habitat

Description

Research by Essex Wildlife Trust (EECOS 2003) indicates that the land at Fordham Hall Estate been under arable cultivation since the time the Chapman and Andre map was prepared, 1777. Historic factors together with field evidence indicate that little of significant interest remains of the former grassland on which to build a conservation programme.

The Semi Natural Open Ground Habitat (SNOGH) is made up of two discrete areas: Almost 9ha, the 'Floodplain', is entirely natural in its origin arising from setaside in the river valley and almost 150 acres derived from sowing grass and herb mixes, the 'Valley side'.

The Floodplain

There is approximately 1.97km of river frontage with 8.84 ha of land in the immediate flood plain. Made up of two fields and a former Cricket Bat Willow Stand. All areas are prone to flooding in winter. The flood plain area is comprised of four broad habitat types:

River and river margin: The River Colne is about 5m across within the channel and for much of its length it has moderately steep and deep banks. In 2007 the Environment agency reprofiled sections of the river bank which has done much to increase the abundance of marginal and emergent vegetation. Otters are resident along the Colne with footprints confirmed within the Trust's stretch of the river and the regular use by otter of an artificial otter holt. At the time of acquisition Water voles were believed to be extinct along the river however, in partnership with Essex Wildlife Trust a population of Water Voles were reintroduced and following monitoring by EWT a thriving population now exists. No information on fish populations and other aquatic species.

Floodplain fields: Two fields, totalling 8.84 ha, lie adjacent to River Colne and are prone to seasonal flooding. Both fields had been under arable cultivation but converted to grazing in 2006 following a few years as setaside. Along the riverbanks of both areas are a number of trees, mainly Cricket Bat Willow and Alder although there are one or two significant Crack Willows.

Marsh: Low-lying area within the easternmost floodplain field where cultivation work was stopped in 1997 and the area left to develop naturally. For much of the year there is a pool of open water with a marshland fringe and damp grassland beyond that. The range of flora that has developed over the intervening years has been quite remarkable with six ERDL species recorded in 2009 by EECOS.

Cricket Bat Willow: Two stands of Cricket bat Willows, heavily thinned in 2007, immediately adjacent to the River Colne. The eastern-most stand has a more diverse range of marshland plants with large patches of Meadowsweet, Reed Canary-grass and Yellow Iris. There are a number of gnarled alder stumps and trees

The Valley Side

Open ground along the valley side was sown to two contrasting seed mixes in 2007. One was a conservation mix and one a hybrid productive mix of grass and clover. The intention is to observe the different development of these two areas over the years and review which has been most successful and implement this across both fields. A third area, by the car park, which was initially

sown to grass was overtopped with hay from a local flower rich meadow. Six years later this has produced floristically spectacular results.

The Floodplain grassland has been grazed by Soay sheep since 2006 while the car park meadow has been cut for hay late in the season to let the plants seed. The hay has been used to spread seed across the site. The new sown grassland on the valley sides has been laid out ready to be grazed from 2010.

Significance

The habitats that have the potential of being restored are of national conservation significance with nationally rare and protected species associated with them.

Opportunity to create a locally significant biodiversity reserve with good prospects to facilitate the spread of species along the river valley.

Grazed semi-natural grassland is a nationally declining habitat which is particularly scarce in this part of Essex.

In landscape terms grazed grassland in the river valley restores a landscape lost since the war and does so in a way that benefits a wide diversity of plant and animal species.

Opportunities & Constraints

Constraints

- C1: Practicality of maintaining high water levels
- C2: Water quality especially nutrient levels
- C3: Damaging and invasive species such New Zealand Pigmyweed and American Mink
- C4: Availability of graziers
- C5: Public response to widespread erection of fences
- C6: Environment Agency statutory requirements
- C7: Natural succession leading to woodland
- C8: Control of noxious weeds

Opportunities

- O1: To restructure the floodplain fields and marsh so they retain water for longer on the land
- O2: To work with neighbours to extend habitat restoration work on both sides of the river
- O3: To improve aquatic habitats for fish and mammals
- O4: To expand the area of native provenance grassland plants
- O5: To create a diverse grazed habitat
- O6: To create natural floodplain woodland.

Factors Causing Change

Deer damage, natural regeneration of wet woodland species, integration of public access with livestock

Long term Objective (50 years+)

The creation of a large area of conservation grassland managed to increase populations and opportunities for grassland birds, animals and invertebrates as well as local provenance grassland plants.

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

Annual cutting for wildflower seed of the car park meadow. Collection of the arisings for use in spreading the seed across the site. (Ongoing)

Grazing/Hay cutting of other meadows in association with tenant grazier.(Ongoing)

Marsh area grazed and not cut. Scrub encroachment managed to reduce spread across the area (Ongoing)

Maintenance of Barn Owl boxes across the SNOGH areas (Ongoing)

5.4 Landscape Value

Description

The large size, close proximity to ASNW and its location within a prominent river valley ensures that the Fordham Hall Project is of regional conservation significance. The main potential is for the Fordham Hall Project to act as a catalyst for change and improvement within the wider landscape, in terms of achieving benefits for wildlife. The potential impact on the project of wider landscape level changes are significant constraints on the project and result in a need to maintain close liaison with local partners. Particular changes to note are:

- The rising deer population within the area
- River management policies and their impact on water levels

At the same time some of the changes the onsite work will bring about have the potential to impact on our neighbours land management some of which have statutory implications for the project while others can affect people's perceptions of the project and our working relationships with neighbours. To date neighbours have already highlighted concerns over:

- The potential of the project to increase harmful agricultural pests, deer, rabbits and pigeons
- The impact of the project on water property rights
- Potential problems from noxious weed spread as a consequence of the project
- The change in the visual landscape due to new fencing and the potential smell of livestock close to people properties

Initial action was taken through the Deer Initiative to start measures to improve our understanding of the deer populations in the area. This involved working with neighbours in surveying deer populations on their land. This work was not progressed as deer populations were initially considered to be low.

Significance

The Fordham Hall Estate Project is very much a 'Landscape Scale' project with the potential because of its size to facilitate significant conservation, access and other benefits beyond its boundaries. Many of these potential offsite benefits are in line with WT corporate aspirations.

Opportunities & Constraints

Constraints

C1: Inadequate survey and other information

C2: Undeveloped working relationships with neighbours and potential partners

Opportunities

O1: To greatly expand the conservation benefits of the Fordham Hall Estate investment

O2: To anticipate, reduce and avoid potential problems by closer working ties with neighbours

Factors Causing Change

Agricultural policies and subsidies

Long term Objective (50 years+)

The creation and management of a large area of grazed scrubby open ground with a max of 20% tree/scrub canopy cover. A range of grazed habitats established including: river valley marshland, wet woodland and open scrubby grassland. Pond and stream edge habitats will be expanded. In collaboration with our neighbours the expansion of habitat creation works onto their land.

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

Wet-woodland: River side cricket-bat willow stands converted to native wet woodland stand types through natural colonisation of the area by native trees and shrubs following earlier thinning of the canopy. (Ongoing)

Promote the development of scrubby thickets along parts of the river edge where public access is restricted to provide temporary hideouts for otters. (Ongoing)

Maintain at least one artificial otter holt along the WT stretch of the river. (Ongoing)

Annual collection from local sites and sowing of Lesser Calamint in appropriate locations across the site (ongoing)

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	32.54	Mixed native broadleaves	2003	High forest	Site structure, location, natural features & vegetation	Informal Public Access, Landscape Value	Conservation Area
<p>New native woodland planted in 2003/04. Central core of the sub-cmpt was planted with four different stand types: W8, Plateau Alderwood, Hornbeam-Ash and Ash-Hazel. North of the Chappel Road the land was planted with 100% Sessile Oak and Pedunculate Oak. It should have been all Pedunculate Oak but the Forestry Commission who undertook work in a section of the compartment as part of a research trial into non pesticide weed control planted 100% Sessile Oak by mistake. The section of wood planted closest to the car park has been named "Wren Wood" by the donor.</p> <p>A fine example of a polished stone axe head was discovered in the field north of Ponders Road during field walking by archaeologists .</p> <p>Sub Cmpt is part of the Woodland Creation Scheme.</p> <p>Giant Hogweed established and spreading on the south western corner of the sub-cmpt.</p>							
1b	31.36	Mixed native broadleaves	2005	High forest		Informal Public Access, Landscape Value	Conservation Area

New native woodland planted in 2005/06. Planted with four different stand types: W8, Hornbeam-Ash, Lime-Hornbeam, and W10. As part of the overall matrix there is a large (circa 7,000 tree) stand of Small Leaved Lime. Sub cmpt is bisected by 50m wide ride that runs along the line of a gas main that crossed the sub cmpt in an almost north - south axis.

As part of an interpretation trail there are a number of pure species stands of trees representing aspects of post and pre-Ice Age woodland, namely:

- Hazel, Birch and Scots Pine
- Alder, Oak, Small Leaved Lime
- Hornbeam, yew and Beech
- Monkey Puzzle, Gingko and Dawn Redwood.

An initial colonisation stand on the SW corner of the sub-cmpt was planted up in 2008.

The most westerly unplanted corner was dominated by thistles and was subsequently treated (and now cut annually) to reduce the chance of spread onto neighbouring properties.

Fencing along a planted section next to Ponders Road was removed in approx. 2011 and significant rabbit damage to a considerable number of trees has taken place.

A large Badger sett is located within the wood adjacent to the north west corner of this compartment and is starting to encroach onto the edge of the footpath within the estate.

An agreement with a local wildlife charity (Naturetale Restoration Foundation) has been set up to allow them to investigate the establishment of wildflower meadows which contain as wide a variety of species as possible and particularly focussing on those species that are hardest to get established. The trial will take place along the gas wayleave that runs from Ponders Road to the PROW running east to west in the middle of the compartment.

1c	18.66	Mixed native broadleaves	2006	High forest		Informal Public Access, Landscape Value	Conservation Area
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New native woodland planted in 2006/07. Planted with four different stand types: W8, Ash-Hazel, Hornbeam-Ash and Plateau alderwood. Two wide rides split the sub cmpt. On the west a gas main runs along a 50m wide corridor while on the east a wide ride cuts up through the sub compartment as part of creating an open walk for children walking to Fordham School from Ford Street.

On the north edge of the sub-cmpt there is Cricket Bat Willow stand surrounded by mature robust hedge. The stand was heavily thinned in 2007 and replanted with replacement Cricket Bat willows.

1d	14.40	Mixed native broadleaves	2007	High forest		Informal Public Access, Landscape Value	
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New native woodland planted in 2007/2008. Planted as a W8 woodland mix. Boundaries largely dominated by an elm hedge except on the south where it is Cricket Bat Willow stand along the floodplain adjacent to the River Colne with some native wet woodland components. In 2007 it was heavily thinned with the intention that the remaining trees be left to grow and senesce naturally. The Essex Way PROW passes through the CBat willow stand following the line of the river.

Outcropping London Clay on the north-west of the sub-cmpt gives rise to, 55 million year old soil. During the EIA consultations it was proposed that we coppice the woodland in front of the houses on the North to mitigate impacts on the residents amenity.

A water main wayleave runs along the western boundary of the most north-westerly field in this compartment.

1e	17.32	Mixed native broadleaves	2004	High forest		Informal Public Access, Landscape Value	
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New native woodland planted in two phases. The northern half was planted in 2004/05 and the southern half in 2007/08. Three broad stand types established: W8, Hornbeam-ash, and ash-hazel.

Southern boundary of the sub-cmpt is a minor road (Fossetts Lane) with ditch that appears to be permanently wet. Water rights have been claimed for this field by a residential neighbour and the woodland on the wayleave will be kept coppiced to reduce root activity.

A water main wayleave bisects the most southerly field in this compartment.

2a	0.00	Open ground	2006	Non-wood habitat	Management factors (eg grazing etc)	Informal Public Access, Landscape Value	Conservation Area
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Open area with five 25m square planted clumps. The intention is to create an open common similar in character as Fordham Heath. Open ground sown to grass in 2003 with subsequent oversowing of local wildflower rich hay. Initial results appeared poor however it is now well established with 13 grass species and 45 herb species, including the Essex red data book species: Yellow Wort Common Broomrape and Southern Marsh Orchid.(Surveyed 2009)

The site car park is in this compartment.

2b	0.00	Open ground		Non-wood habitat		Informal Public Access, Landscape Value	Conservation Area
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Former arable field sown to a grass clover mix in 2007, originally managed for hay and now grazed. In Q3 2008 hay from the car park meadow was scattered on a section of the grassland and saw a profusion of yellow rattle springing up in 2009.

Q4 2009 the whole area was enclosed by stock fence with livestock handling facilities and water troughs also installed. Some residents backing onto the property by the Shoulder of Mutton Pub objected to the introduction of grazing in the 2009.

An Archaeological Fieldwalking exercise highlighted a prevalence of burnt and worked flints towards the north-west corner of the sub-cmpt indicating the possibility of a prehistoric settlement in this field.

The Essex Way long distance footpath runs along the southern boundary.

2c	0.00	Open ground		Non-wood habitat	Archaeological features	Informal Public Access, Landscape Value	Conservation Area
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Former arable fields sown to a grass and wildflower mix in 2007, originally managed for hay and now grazed. In Q3 2009 hay from the car park meadow was scattered on a section of the grassland. Q4 2009 the whole area was enclosed by stock fence with livestock handling facilities and water troughs also installed. These fields are currently grazed by cattle by a neighbouring farmer. In 2011 a combined wildlife and cattle watering pond was established in south west corner of the most easterly field in this compartment. It has developed well and the original water troughs are no longer used.

The eastern blocks were field walked in 2002 which highlighted a prevalence of burnt and worked flints indicating the possibility of a prehistoric settlement in the field. An individual Roman settlement and Roman burial with two graves was found in the 1970's in the northern field of the sub-cmpt and is now an archaeological focus area with on-going archaeological investigations taking place (2013 - 2016).

Barn Owls regularly nest in a Box situated in the centre of the sub-cmpt.

A water main wayleave runs along the eastern boundary of the eastern field in this compartment before crossing the River Colne

2d	0.00	Open ground		Non-wood habitat	Legal issues	Informal Public Access, Landscape Value	Conservation Area
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Former arable field situated within the floodplain and water logged in Winter and Spring with flooding in most years. After being cut annually, sheep have now been grazed on the field since 2006. Grazing typically starts in late summer.

The River Colne forms the southern and western boundary while a minor stream that flows into the Colne forms the eastern boundary. Otters have been recorded along the Colne and their footprints observed in the silt in the mud of this section of the Colne. A number of mainly willow trees fringe the riverside of this sub-compartment.

2e	0.00	Open ground		Non-wood habitat		Informal Public Access, Landscape Value	Conservation Area, Site of Local Nature Conservation Importance
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Former arable field situated within the floodplain and often water logged in Winter and Spring with flooding in most years. After being cut annually, sheep have now been grazed on the field since 2006. Grazing typically starts in late summer.

In Q1 2007 the Environment Agency undertook a programme of conservation reprofiling of sections of the river bank to promote marginal vegetation and fish conservation. The spoil removed from the bank was spread towards the NW corner of the field by first removing the top soil of the area then spreading the river bank spoil and then replacing the top soil.

The area was designated a Site of Local Nature Conservation Importance site in 2008 largely as a result of the rich marshland flora, including six Essex Red Data Book Species, that has developed since arable cultivation stopped 15 years ago.

Otters have been recorded along the Colne and in association with Essex Wildlife Trust (EWT) a Water vole reintroduction programme was successfully undertaken in about 2011. EWT monitor the Water vole population and utilise the site for Water vole identification courses.

To the immediate south of the compartment, the River Colne is eroding the riverbank and is now exposing a gas main pipeline. On-going discussions are taking place to agree a mutually acceptable solution to reduce the erosion, maintain this highly valuable habitat and protect the gas main infrastructure. One proposal is to realign the river to follow the old course of the river and leave the meandering section as a hugely valuable backwater habitat.

3a	0.00	NULL		Non-wood habitat		Informal Public Access, Landscape Value	Conservation Area
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Two arable fields which due to leasehold reasons have to be retained in an undeveloped state for the first 25 years of the lease. The fields are surrounded by hedges and within the northern field extent local allotments can be found along the western boundary of the northern field (the allotments are outside the Woodland Trust leasehold area). The fields are currently used by a local farmer to grow arable crops.

There is an overgrown pond on the northern boundary while the south-western corner is opposite the three Horsehoes pub.

A water main wayleave runs along the most eastern boundary of this compartment.

3b	0.00	NULL		Non-wood habitat		Informal Public Access, Landscape Value	Conservation Area
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Arable field which due to leasehold reasons has to be retained in an undeveloped state for the first 25 years of the lease. Along the western boundary it is almost a Shaw Woodland and includes cultivated apples within it.

3c	0.00	NULL		Non-wood habitat		Informal Public Access, Landscape Value	Conservation Area
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Former arable field which has been retained for community use. In 2007 an area was leased to the Parish Council for use as a mountain bike course.

A water main wayleave runs along the most eastern boundary of this compartment.

3d	0.00	NULL		Non-wood habitat	People issues (+tve & -tve)	Informal Public Access, Landscape Value	Conservation Area
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Ex-Arable fields, historically reserved for 'community' use following requests for a community orchard and other community initiatives during the initial site acquisition consultation. A surfaced path linking a low cost housing development north of the sub compt with the village proper was constructed under a section 106 agreement in 2006 along the eastern boundary.

In 2010/11 a community orchard was established with significant support an input for numerous local stakeholders and experts. A hedge was planted along the eastern boundary of the orchard and the management of the orchard is overseen by a well known and respected local naturalist in liaison with the Woodland Trust. A new entrance sign will be designed and installed in 2016.

It has been agreed, in association with the Fordham in Bloom committee, to allow the small field (adjacent to Mill Road and leading onto the orchard) to be developed into a wild flower meadow commencing in 2016.

Historically there have been persistent problems with local youth riding motor bikes on the field. However, no instances have been reported over the last few years.

A water main wayleave runs along the most eastern boundary of this compartment.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	1d	Thin	3.00	33	100

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.