

Millennium Country Park

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| Date (from/to) | 2013 - 2033 |
| Date of last review [UKWAS 2.1.3] | N/A |
| Owner/tenant | The Marston Vale Trust |
| Agent/contact | Anna Charles |
| Signed declaration of tenure rights and agreements to public availability of the plan [UKWAS 1.1.3/1.1.5/2.1.2] | |

1 Background information

1.1 Location

| | |
|----------------------------------|--------------------------------------|
| Nearest town, village or feature | Marston Moretaine, Bedfordshire |
| Grid reference | TL 015 417 |
| Total area (ha) | 225ha (of which 20.12ha is woodland) |

1.2 Description of the woodland(s) in the landscape

The Millennium Country Park is a Green Flag award-winning site which comprises mixed land uses, including grazed pastures, rough grassland, woodland, lakes, wetland habitats, and the Forest Centre and its environs. The Park lies at the heart of the designated Forest of Marston Vale area, in the bottom of the clay Vale, between the communities of Marston Moretaine and Stewartby. Of the 225ha Park, some 20.12ha is woodland, comprised mostly of new woodland plantings dating from the creation of the Park (from the previous arable farmland) during 1998-2000. However, areas of more mature woodland exist, including blocks and groups dominated by mature poplar trees. These are largely remnants of once larger woodland belts (largely of poplar) planted originally for screening associated with past clay extraction and brick making, which have formed notable landscape features but have lost their integrity due to steady decline of poplars due to disease and drying ground conditions. The significant areas of

planting undertaken during 1998-2000 were in part a response to this declining woodland condition and likely loss of the poplars notable landscape features. The late 1990's plantings have established themselves as young woodlands and components of the local landscape, visible from well-used recreational access routes within the Park (which receives c.450,000 visits per annum).

(N.B. The Park contains significant areas of scrub habitat, some very mature, but this is not included within this woodland management plan as it is not deemed to currently be 'woodland' nor is there an intent to manage it to develop into woodland. It is largely managed with support from Higher Level Stewardship.)

1.3 History of Management

The Millennium Country Park was created in 1998-2000 as a new multi-functional greenspace at the heart of the Forest of Marston Vale. It developed and expanded on the previous smaller Stewartby Lake Country Park, itself the result of the historic restoration and flooding of a disused clay pit (i.e. Stewartby Lake). The current woodland assets in the Park result from both screen planting of predominantly poplar belts associated with past clay extraction and more recent and significant native broadleaf woodland plantings as part of creating the Park during 1998-2000.

Until the site was acquired by the Marston Vale Trust in 1998, very little woodland management was evident. The Trust secured WGS support for c.15ha of new native woodland planting undertaken during 1998-2000. The Trust has had to implement some initial (selective) thinning and individual tree felling works to the mature poplars within the Park due to safety concerns and risk management practices. A felling licence was obtained for each phase of poplar felling works as necessary. A full arboricultural tree safety survey has revealed that most of the remaining mature poplars in the woodland blocks/belts (and those forming smaller groups of trees) need to be removed over the coming 5 year period, and these woodland areas converted to more appropriate and diverse native species composition. The extensive new plantings have developed well, with significant areas now requiring initial ("early") thinning to restructure to increase structural diversity and release oak/ash stems of potential value. This work has not been commenced due in part to the lack of interest in the arising material for conventional (wholesale) firewood markets, and the economic impacts of this on the cost of such operations.

2 Woodland Information

2.1 Areas and features

| Designated Areas | Map No. | In Woodland | Adjacent to woodland |
|---|---------|-------------|----------------------|
| Special areas for conservation (SACs) | | No | No |
| Special Protection Areas (SPAs) | | No | No |
| Ramsar Sites (see note on Guidance) | | No | No |
| National Nature Reserves (NNRs) | | No | No |
| Sites of Special Scientific Interest (SSSIs) | | No | No |
| Other designations (e.g. National Park (NP) / World Heritage Site) | | No | No |
| Areas of Outstanding Natural Beauty (AONBs) | | No | No |
| Local Nature Reserves (LNRs) | | No | No |
| TPO / Conservation Area (CA) | | No | No |
| Details We have areas of designated Country Wildlife Site adjacent to woodland | | | |
| Rare and important species | Map No. | In Woodland | Adjacent to woodland |
| Red Data Book or BAP species | 2 | No | Yes |
| Rare, threatened, EPS or SAP species | 2 | No | Yes |
| Details The Millennium Country Park was designed to benefit a range of national and local BAP priority species, and already hosts impressive biodiversity value despite its relative immaturity. Current information is based on the observations of Park staff, local birdwatchers and local naturalists. Bedfordshire and Luton Biological Records Centre are also able to provide data for the area. The Park has had around 212 recorded bird species, with at least 21 classified as Red list by the RSPB. Great Crested Newts are found widely on site. Otter has been using the site as feeding territory for a number of years and Brown Hare is recorded regularly. Both Dingy and Grizzled skipper butterflies are recorded each year on the 'Callow mounds' which is a mixed scrub habitat. Further details on the biodiversity interest of the Park as a whole can be found in the existing overall Management Plan and associated appendices for the site available at: Publications The Forest of Marston Vale The Forest of Marston Vale | | | |
| Habitats | Map No. | In Woodland | Adjacent to woodland |
| Ancient semi-natural woodland (ASNW) | | No | No |
| Other semi-natural woodland | | No | No |
| Plantations on ancient woodland sites (PAWS) | | No | No |
| Semi-natural features in PAWS | | No | No |
| Woodland margins and hedges | 4 | No | Yes |
| Veteran and other notable trees | 4 | Yes | Yes |
| Breeding sites | 4 | Yes | Yes |

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|--|-----|-----|-----|
| Habitats of notable species | 4 | No | Yes |
| Unimproved grasslands | | No | No |
| Rides and open ground | 2/3 | Yes | Yes |
| Valuable wildlife communities | 4 | Yes | Yes |
| Feeding area | 4 | Yes | Yes |
| Lowland heath | | No | No |
| Peatlands | | No | No |
| Others | | | |
| <p>Details</p> <p>Narrow woodland margins (c.1-2m wide) exist to the edges of most woodland areas, but these are too narrow to afford any notable ecological or ecotone function. It is hoped to add diversity to our existing young woodland edges by clearance and coppicing and introducing 'scalloping' of the woodland edge. A significant boundary hedges exist to the south of the Park which is being laid annually in sections. To the north of the Park, a hedge surrounds Stewartby Lake, much of this is over mature hawthorn and is gappy in places. The existing (declining) mature poplar trees within remnant woodland belts and elsewhere are notable in terms of their landscape impact. A small group of mature oaks (known as 'Eleven Oaks') exists in the Centre of the Park. As previously mentioned, the Trust has had the Park's mature tree assets surveyed as a separate risk management/tree safety exercise, yielding good data on the health, dimensions and ecological interest of c.1,000 mature trees across the Park, including those forming existing woodland areas. The rich mosaic of habitats within the Park provide a variety of breeding sites for a range of birds, mammals, amphibians and invertebrates. The reed bed habitats in particular are a National Priority habitat and provide breeding areas for a range of reed bed and wetland specialists eg Bearded Tit. Areas of open ground and rides exist within some woodlands, partly arising from recreational access routes through several woodland areas. It is hoped to add diversity to our existing young woodland edges by selectively felling small areas of trees within the woodland to introduce diversity and create open ground and glades.</p> <p>Further details on the habitats of the Park as a whole can be found in the existing overall Management Plan for the site available at Publications The Forest of Marston Vale The Forest of Marston Vale</p> | | | |

| Water | Map No. | In Woodland | Adjacent to woodland |
|---|---------|-------------|----------------------|
| Watercourses | 4 | No | Yes |
| Lakes | 4 | No | Yes |
| Ponds | 4 | No | Yes |
| Wetland habitats | 4 | No | Yes |
| <p>Details</p> <p>The Park contains various lakes, ponds, watercourses and wetland habitats, all within the areas surrounding the woodlands within the Park. Stewartby Lake is an ex- brick pit fed by the Elstow Brook. It is used widely for watersports but retains ecological interest in designated 'no go' areas. The Pillinge Lake is managed for nature conservation, it is rainwater fed. The wetland habitats and reed bed water levels can be manipulated to some degree using an artificial pumping system which extracts water from The Pillinge and channels water via a network of pipes to the various wetland areas. A number of field ditches occur on site.</p> <p>Further details can be found within the existing overall Management Plan for the site available at Publications The Forest of Marston Vale The Forest of Marston Vale</p> | | | |

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| Landscape | Map No. | In Woodland | Adjacent to woodland |
|---|---------|-------------|----------------------|
| Landscape designated areas | | No | No |
| Landscape features | 2/3 | Yes | No |
| Rock exposures | | No | No |
| Historic landscapes | | No | No |
| Areas of the woodland prominent from roads | 1 | Yes | |
| Areas of the woodland prominent from settlements | 1 | Yes | |
| <p>Details</p> <p>Cpts 2 & 7 are dominated by mature poplars which form prominent features in the landscape. Cpt 24 lies adjacent to Bedford Road, Marston Moretaine, a partly residential street, whilst cpts 10-13 are visible (but not necessarily prominent) from Station Road, Marston Moretaine.</p> | | | |
| Cultural features | Map No. | In Woodland | Adjacent to woodland |
| Public rights of way | 5 | Yes | Yes |
| Prominent viewing points | | No | No |
| Existing permissive footpaths | 6 | Yes | Yes |
| Proposed permissive footpaths | | No | No |
| Areas managed with traditional management systems | | No | |
| <p>Details</p> <p>The Park contains c.17km of established linear access routes comprising both permissive paths and statutory routes. A mix of statutory and permissive access routes run adjacent to (and through some of) cpts 2, 3, 4, 5, 6, 8, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 25 and 26. Cpt 25 has a permissive access route within it.</p> | | | |
| Archaeological Features | Map No. | In Woodland | Adjacent to woodland |
| Scheduled monument | 7 | No | Yes |
| Historical feature (Inc. designed landscapes, registered parks and gardens) | | No | No |
| Other | | | |
| <p>Details</p> <p>The Devils toenail (listed building 3/59) is a grade II listed monument. The shaped stone is believed to be the remains of a medieval cross made from limestone. It consists of a stump of an octagonal stone column, approximately 50cm high and 30cm in diameter.</p> | | | |

2.2 Woodland resource characteristics

The Millennium Country Park includes some 20.12ha of woodland. The woodlands within the Park are described below with reference to the accompanying site plan 2 and 3

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Cpt 1 – 0.78ha

Area of natural colonisation/regeneration believed to have developed from the late 1980's onwards comprising intimate mix of poplar, willow, alder, sycamore, and birch with very little understorey. Trees are relatively dense, although a recent rudimentary thinning exercise was undertaken to facilitate improved accessibility for groups seeking to use the area for bushcraft and related purposes.

Cpts 2 & 7 – 1.64ha

Two remnant areas of mature poplar belts, originally planted as part of screen planting associated with the past clay extraction and brick making industrial activities across the Marston Vale. These cpts are dominated by the remaining mature poplars, with limited understorey present and limited species and structural diversity. The poplars are typically spaced at around 4-5m in cpt 7, but sparser in cpt 2, although the stems are notably larger in cpt 2 (typical dbh of >35cms versus 30-35cms). A sizeable volume of poplar will need to be removed as part of restructuring these cpts and addressing the decline of this species within the Park. These cpts will be regenerated through felling to remove all poplars and converting these areas to a native species mix using planting.

Cpts 3, 4, 6, 8, 9, 19, 20 & 22 – 7.35ha

Broadly similar mixed native broadleaved plantations planted between 1999-2000 using an intimate and randomly distributed mix of oak (c.30%), ash (c.30%), field maple, wild cherry, birch, alder, willow and a minor woody shrub component (mostly hazel). Plantations were planted at c.2.1m spacings, yielding approx. 2250 stems/ha. Species diversity is reasonable, with no single species comprising a significant or dominant proportion of the overall mix (i.e. <50%). Woodland structure is uniform, with little structural diversity resulting from the plantation origins. Cpt 3 shows slightly better growth rates compared to other areas.

Cpt 5 – 1.67ha

An area evolving from mature scrub into juvenile woodland largely through natural successional processes, with existing groups of maturing oak plus younger birch, willow and ash amongst thickets of over-mature hawthorn, elder and blackthorn.

Cpts 10,11, 12 & 17 – 0.91ha

Minor areas of native broadleaved woodland planting undertaken during 1999-2000 as part of the Park's creation. Species mixtures are diverse, reflecting aesthetic and biodiversity function of much of these cpts, although cpt 12 was densely planted with willow, alder and ash (in order to screen adjacent residential properties) which has grown very well and requires intervention (i.e. selective thinning).

Cpts 13, 15, 16 & 18 – 4.66ha

Broadly similar mixed 'wetland' native broadleaved plantations planted between 1999-2000 using an intimate and randomly distributed mix of willow (c.20%), birch (c.20%), alder (c.15%), oak (c.10%), ash (c.10%), field maple and woody shrub component. This

mix was driven by ecological objectives associated with the creation of a wetlands nature reserve at the core of the new Park. Plantations were planted at c.2.5m spacings, yielding approx. 1600 stems/ha. Species diversity is reasonable, with no single species comprising a significant or dominant proportion of the overall mix (i.e. <50%). Woodland structure is uniform, with little structural diversity resulting from the plantation origins.

Cpt 14 – 0.5ha

Area of new planting from 1999-2000 using predominantly willow to create screening between nearby reed bed habitat and Forest Centre access road. Planting lies under high voltage o/h cables and is adjacent to a pylon, with the willow species planted to allow for coppicing on rotation to prevent attainment of any significant height.

Cpt 21 – 0.16ha

Small plantation of aspen planted in 1999 for largely landscaping/aesthetic purposes, which have performed very well. Originally planted at c.3m centres, these aspen now typically have a dbh of 15cms and will require thinning in the coming 5-10 years.

Cpt 23 – 1.15ha

This cpt was planted c.1995 as a native broadleaved plantation using an intimate and randomly distributed mix of oak (c.30%), ash (c.30%), field maple, wild cherry, birch, alder, willow and a minor woody shrub component (mostly hazel). Planting was undertaken at c.2.5m spacings, yielding c.1600 stems/ha. Typically, these young broadleaf trees have a dbh in the range 10-15cms. Some very limited selective thinning has been undertaken in recent years using volunteers to improve structural diversity, but the number of trees removed is estimated as <30.

Cpt 24 – 1.30ha

This area is a semi-mature mixed broadleaved woodland, believed to arise from a mixture of plantings during the 1970's by the London Brick Company as part of ongoing screen planting and subsequent natural colonisation/regeneration. Species mix is centred around ash, with birch, oak, poplar, and some sycamore and wild cherry and a scrub/shrub component. A linear strip of c.6-8m width running longitudinally through the cpt is relatively free of trees owing to interventions to protect the (minor) overhead cables. An old ditch/watercourse corridor also runs along a similar alignment, but this has become colonised and now forms part of the overall woodland cpt, although species, age and structure differ along this corridor. There is a lack of any formal planting pattern evident, giving a fairly 'natural' feel, aided by variability in tree density and size, but trees are typically spaced at 4-5m suggesting a density of c.400-600 stems/ha including all stems. Of the whole cpt, c.50% could be described as broadly similar semi-mature woodland, with the balance less mature with open ground and dense, younger areas of regeneration (10-15 years old). Some historic minor felling of poplars and restocking with native broadleaves has occurred, but not to any great extent and the restocking is developing well but appears to be restricted by limited light reaching the woodland

floor/understorey. There remain dense areas of ash of estimated 30-50 years in age (typical dbh in the range 20-30cms), which would benefit from targeted thinning.

2.3 Site description

The Millennium Country Park has generally flat topography, lying in the floor of the Marston Vale. The site is open, but not particularly exposed to wind risk. The soils are heavy clays, characteristic of the area, with cpts 3-20 largely planted on ex-arable farmland with inherent residual fertility.

Access into and around the Park for operational purposes is very good, although the primary access routes (mostly engineered surfaces) for accessing most cpts are shared with pedestrians, cyclists, equestrians (N.B. the Park receives c.450,000 visits per annum).

The woodlands within the Park arise from three broad processes – historic planting of woodland screening belts associated with the areas industrial past, natural successional processes over many decades, and a significant amount of recent planting undertaken in 1995-2000 as part of creating the Park. Most cpts have been left largely unmanaged since they were planted/became established, and have not had any specific uses (e.g. sporting, livestock, game rearing, commercial recreation) developed within them. The site has been created principally for landscape, biodiversity and recreational benefits; with timber production a more minor long term objective.

2.4 Significant hazards, constraints and threats

2.4.1 Hazards – the Park is crossed by strategic high voltage power lines and also some local overhead power lines. The abundance of water bodies within the Park presents notable hazards regarding working nearer water.

2.4.2 Constraints – the site is heavily used by the public for recreation, principally along the provided linear access routes which also facilitate operational access. Good liaison and communication is required with both the local community and general public (i.e. visitors) to ensure advanced notice of any works and explanation of the purpose of any works.

2.4.3 Threats –

Public access

The significant public use of the site poses the risk of minor vandalism and damage, but these are not deemed to be significant threats based on experience to date.

Browsing herbivores

The local deer population (Muntjac and Chinese Water Deer) is notable, but not believed to be as significant a threat as elsewhere in the area, largely due to the degree of

disturbance to the site from visitor numbers and daily users (e.g. dog walkers). Deer damage is monitored on an ad hoc basis currently. The Park's rabbit population remains very significant, despite ongoing management. Public roads run alongside various boundaries of the Park. Roadside trees are included in the annual tree inspection schedule to ensure any risk to road users is minimised.

Disease

The main disease threat is by *Chalara fraxinae*. Mature tree health is monitored via annual surveying to reduce as far as possible the threat of diseased or dead trees to public safety. Regular monitoring for presence of *Chalara* is to be carried out, particularly in younger areas of planting. Threats from Acute Oak decline and *Phytophthora* are likely to be lower given the numbers of potential hosts within the Park.

3 Long term vision, management objectives and strategy

3.1 Long term vision

The woodlands of the Millennium Country Park should exemplify multi-purpose forestry, providing a range of environmental, social and economic benefits. They should compliment the complex of semi-natural habitats within the Park, providing visitors with areas of notable woodland 'aesthetic' and woodland biodiversity value along with the potential for saleable timber in the future.

The Millennium Country Park is not FSC certified. The Marston Vale Trust has made the decision not to maintain current FSC certification for our woodlands nor seek to certify new woodland for the foreseeable future. The decision has been made due to the financial implications to the charity of maintaining the certification. All woodlands, including The Millennium Country Park will continue to be maintained according to UK Forestry Standard and current best practice guidelines.

3.2 Management Objectives

- To enhance the landscape and aesthetic value of the woodlands
- To create woodlands which better reflect their landscape/ecological setting
- To increase the net biodiversity value of the woodlands of the Park
- To increase public use and enjoyment of the site
- To encourage the development of small quantities of saleable timber

All management will be in compliance with the UK Forestry Standard (UKFS)

3.3 Strategy

- Convert existing mature poplar belts to locally characteristic and native species through felling to remove all poplars and recolonisation using planting and natural regeneration where possible.
- Increase structural and age diversity of the existing native broadleaf plantation woodlands through glade creation, pruning, thinning and woodland edge management.
- Manage woodlands to maintain public access and ensure a safe, welcoming and stimulating environment. Promote educational activities and events to schools, community groups and the wider public.
- While timber production is a minor objective, management work may provide viable thinning products (eg firewood) and potentially some mature trees with timber value.

3.4 Woodfuel Initiative

Would you be interested in receiving information on funding opportunities for the purchase of harvesting machinery or wood fuel boilers, or for grants that support timber production from your woodlands?

/ **No** (delete as appropriate)

4 Management prescriptions/operations

4.1 Silvicultural systems

4.1.1 Harvesting

No specific harvesting plans have yet been devised for the woodlands. Timber production is not a primary objective but Low Impact Systems – comprising continuous cover, small group and individual tree felling – will be developed and implemented in accordance with the Trust's commitment to multi-purpose and sustainable forestry. Non intervention areas will be identified.

4.1.2 Phased felling and restructuring of plantations

The remnant poplar belts (cpts 2 & 7) will be regenerated through felling to remove all poplars and converting these areas to a native species mix using planting and natural regeneration where possible.

Cpts 1 & 24 will be restructured using selective thinning to increase age and structural diversity, including where necessary the targeted removal of less desirable species such as poplar, instead favouring ash, oak, birch, field maple and other locally native species.

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Cpts 3, 4, 6, 8, 9, 13, 15, 16, 18, 20, 22 & 23 are relatively young native broadleaf plantations of 13-18 years in age requiring initial thinning and coppicing over the coming 5 years to restructure them to enhance their structural diversity and deliver improved biodiversity, landscape and aesthetic benefits.

4.1.3 Establishment, restocking and regeneration

Post-thinning regeneration within cpts will be allowed to occur through natural processes, largely without any restocking except for cpts 2 & 7 where restocking with native species is acknowledged as being necessary. Stumps of non-desired species removed by thinning will be selectively treated with herbicide to prevent regrowth, whilst the stumps of native species removed during the thinnings process will be allowed to regenerate in multi-stem form to rapidly introduce a shrub layer component within the previously even-aged and rather uniformly structured plantations.

4.2 New planting

Proposed additions to guidance to clarify consideration of design impacts etc. [UKWAS 3.2.1/3.2.2], to add reference to local native seed zones and FRM regulations [UKWAS 6.3.3].

Cpts 2 & 7 will be regenerated through replanting of native species using local provenance stock. No other new woodland planting is currently proposed for the Park.

4.3 Other operations

Proposed additions to guidance to clarify consideration of design impacts etc. [UKWAS 3.2.1/3.2.2], to add reference to local native seed zones and FRM regulations [UKWAS 6.3.3].

N/A

4.4 Protection and maintenance

4.4.1 Pest and disease management

Competitive and injurious weeds

Approved herbicides are used to control weed growth around individual trees during establishment. The MVT has policies in place for the control of the growth and spread of harmful weeds (injurious weeds, invasive non-native weeds), with non-chemical control interventions preferred.

Browsing herbivores

Browsing herbivores comprise rabbits and Muntjac deer. New plantings are protected from browsing with either individual shelters/tubes/guards or by fencing. Monitoring of

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bark stripping, regeneration and developing browse lines is currently on an ad hoc basis. This process will be formalised in coming years as deer pressure increases. Rabbits are controlled regularly by a shooting group. This same group can be approached, when deer culling become necessary.

Disease

Chalara

Mature tree health is monitored via annual surveying to reduce as far as possible the threat of diseased or dead trees to public safety. Regular monitoring for presence of Chalara will be carried out, particularly in young plantations. If Chalara is recorded on site, action will be taken in line with the Forestry Commission guidelines at that time. Retention of dead trees for environmental benefits will be considered where appropriate.

Acute Oak decline

Current UK outbreak seems to be in mature oak over 50 years old. There is a very small number of mature oak on site, therefore health can easily be monitored.

Phytophthora

There are several forms of Phytophthora threatening the UK currently. Some forms of Phytophthora can affect English oak which is present in The Millennium Country Park. Any diseased or declining trees will be identified during routine inspections.

The most economically damaging form is *P. ramorum* in larch. No larch is planted within The Park.

4.4.2 Fire plan

A generic Fire Plan has been produced for all MVT sites, to be used in conjunction with the Millennium Country Park Site Plan

4.4.3 Waste disposal and pollution

The Trust operates an Environmental Management System, and has achieved ISO:14001 accreditation status. Contractors are routinely responsible for the lawful disposal of waste materials arising from their operations.

4.4.4 Protection from unauthorised activities

Vehicular access into the Park is controlled via a number of secure entry points/gates. This prevents unauthorised vehicular access to the site.

The regular use of the numerous recreational access routes provides significant 'presence' on site, as does the small Ranger team based on-site at the Forest Centre, and serves as a deterrent to much unauthorised activity. Volunteer Rangers supplement

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the patrolling activities of the salaried Ranger team and add to this deterrent effect.

4.4.5 Protection of other identified services and values

N/A

4.5 Game management

There is no game management at the site.

4.6 Protecting and enhancing landscape, biodiversity and special features

4.6.1 Management of designated areas

N/A

4.6.2 Measures to enhance biodiversity and other special features [UKWAS 2.1.1/6.1.1]

The young woodland has been created to maximise species diversity, with a wide range of native broadleaved tree and shrub species.

The Trust will convert the existing semi-mature and mature mixed broadleaved woodlands to a native species mix through selective thinning regimes, migrating these woodlands to locally native species mix more characteristic of the NVC W8 woodland community which dominates ancient semi-natural woodlands in the Marston Vale. Standing dead wood within these mature and semi-mature woodlands will be retained where not presenting a health and safety risk.

Young native broadleaf plantations will have their structural diversity increased to provide additional habitat and biodiversity value, using selective thinning and coppicing regimes. Where they have no other use, arisings from these processes will be stacked in habitat piles to introduce an important dead wood component to the woodland. Nest boxes are situated in and around the woodland to encourage breeding birds.

Non-intervention areas will be identified to ensure that some areas of woodland receive

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little or no disturbance.

Biodiversity will continue to be monitored using staff and volunteer resources, and support from local birdwatchers and naturalists

4.6.3 Special measures for ancient semi-natural woodland (ASNW) and semi-natural woodland (SNW)

N/A

4.6.4 Special measures for plantation on ancient woodland site (PAWS)

N/A

4.6.5 Measures to mitigate impacts on landscape and neighbouring land [UKWAS 3.1.2]

The existing extent of woodland cover within the Park will be maintained, so ensuring a degree of landscape continuity. However, there will need to be restructuring of most of the existing woodlands to improve their biodiversity value, aid their sustainable productivity, and address the declining condition of the population of mature poplars. The latter will result in impacts on the Park's landscape, but are not deemed to be 'significant' within the context of the overall woodland resource of the Park, especially in view of the considerable increase in woodland cover achieved through planting by the Trust since acquiring the land and creating the Park in 1998-2000. Sensitive design of thinning regimes will be used to mitigate the impacts in notable locations. Overall, the woodland management will be seeking to retain and improve the woodland habitats in the Park, ensuring their sustainable value in environmental, landscape and economic terms.

4.7 Management of social and cultural values

4.7.1 Archaeology and sites of cultural interest

The 'Devils toenail' is not impacted by any management. It is situated in an area of unmanaged grassland and vegetation is periodically cleared by hand around it so it is accessible to visitors.

4.7.2 Public access and impacts on local people

Existing public access to and around the Park is very good, with the Trust having invested significant funds in creating c.14km of footpaths, cycleway and horse trails. These routes all provide a woodland aesthetic in part and afford visitors with woodland

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views and 'experiences'.

Access routes mostly have engineered surfaces, with grass verges mown 4-8 times annually during each growing season. Encroaching woodland growth (either shrubs or tree branches) are pruned/coppiced as necessary by local volunteers as part of seeking to maintain a diverse woodland edge habitat conducive for enhancing the biodiversity value of these access corridors.

Volunteer Rangers help 'patrol' the access routes for the Trust, collecting litter and making minor repairs, and reporting all matters back to the Trust's staff. These volunteers also serve as informal advocates for the Park, engaging with users and providing points of contact within the local communities surrounding the Park.

The Park is very well used with c.450,000 recorded visits per annum. This includes many school and group visits, both guided and self-guided. Community engagement was secured in the planting of the new woodlands when the Park was created, and continues through volunteer work parties that assist with most aspects of site management, including investing significant time in basic estate management operations.

This pattern of community engagement will continue – it is a fundamental approach embedded in how the Trust undertakes its work, adding significant direct and indirect benefits.

5 Consultation

| Organisation/individual | Date received | Comment | Response/action |
|---|---------------|---------|-----------------|
| The aims of this management plan for the Park's woodlands reflects the vision and objectives set out for the Park in the overarching Management Plan, which was prepared through consultation with local communities and key stakeholders and on which the Park's success in obtaining and retaining the Green Flag Award and Natural England Accreditation is based. | | | |

6 Monitoring plan summary

| Objective number, issue or UKWAS Requirement | Indicator | Method of assessment | Monitoring period | Responsibility | How will information be used |
|---|--|-------------------------------------|--|---|--|
| Pest control (objective 1) | Presence and activity | Visual surveys | Bi-annual | Ranger team/volunteer rangers | Will provide information to guide pest control measures |
| Tree maintenance (objective 1) | Condition of tree protection and health of young trees | Visual surveys | Annual | Ranger team/volunteer rangers | Will provide information to guide decisions on removal or replacement of tree guards and presence/absence of disease |
| Development within the landscape (objective 1) | Visibility and impact | Aerial and ground level photography | Annual | Ranger team/volunteer rangers | Provides record of development and information on landscape impact. |
| Removal of failing poplars (objective 2) | Condition of mature poplars | Visual surveys and risk assessment | Annual | Ranger team | Surveys determine program of felling of mature poplar. |
| Monitoring of natural regeneration rate (objective 2) | Regeneration | Visual surveys | Annual | Ranger team | Monitoring of natural regeneration in thinned areas will determine the need for additional protection/pest management. |
| Biodiversity (objective 3) | Improved habitat and species diversity | Visual surveys | Casual surveys carried out predominantly through spring/summer | Ranger team/volunteer rangers/local naturalists | Identification of new species and monitoring of existing species will help inform management decisions. |
| Provide safe and welcoming site | Clean and safe site, minimal | Visual surveys | Daily patrolling Regular | Ranger team/volunteer rangers | Guides regularity of litter picking and raises maintenance |

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| | | | | | |
|--|--|------------------------------|-----------------------|------------------|--|
| (objective 4) | accidents | | structure inspections | | requirements. |
| Site use (objective 4) | Data from people counters | Data analysis | Weekly | Volunteer Ranger | Improved understanding of visitor numbers and use of site |
| Realising timber potential (objective 5) | Development of management systems for timber | Visual survey and assessment | Annual | Ranger team | Understanding of timber potential leading to management intervention |

7 Work programmes

7.1 Outline long-term work programme (2019 - 2033)

(Use this table to outline medium to long term areas of work)

| Cpt. Ref or Name | Activity | Year (<i>tick</i>) | |
|------------------|--|----------------------|-------|
| | | 6-10 | 11-20 |
| 5 | 25% selective thinning designed to restructure naturally developing broadleaf woodland to increase structural and species diversity (target 'scrub' phase species and favour 'forest' species) | * | |
| 13 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity | * | |
| 14 | Coppicing to 25% of stems to increase structural diversity | * | * |
| 15 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity and aid long term production of saleable timber | * | |
| 16 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity and aid long term production of saleable timber | * | |
| 18 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity and aid long term production of saleable timber | * | |

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7.2 Short-term work programme (2013 – 2018)

(Use this table to collect basic inventory data for the woodland areas you propose to work during the next 5 years)

| Cpt. Ref / Name | Area (ha) | Main Species | P. Year | Yield Class | Activity | Year | | | | |
|-----------------|-----------|--------------|---------|-------------|--|------|---|---|---|---|
| | | | | | | 1 | 2 | 3 | 4 | 5 |
| 1 | 0.78 | MBL | - | 4 | 20% selective thinning designed to restructure developing woodland and to remove uncharacteristic and non-native species in favour of native species (targeted poplar removal) | | | | | * |
| 2 | 1.11 | PO/ MBL | 1950 | 6 | Removal of declining mature poplar in favour of native species and subsequent natural regeneration | * | | | | |
| 3 | 3.56 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | * | |
| 4 | 0.76 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 6 | 0.54 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity and aid long term production of saleable timber | | | | | * |
| 7 | 0.53 | PO/ MBL | 1950 | 6 | Removal of declining mature poplar in favour of replanting with native species and subsequent natural regeneration | * | | | | |
| 8 | 0.35 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 9 | 1.34 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 10 | 0.32 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 11 | 0.22 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 12 | 0.32 | NBL | 2000 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity | | * | | | |

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| | | | | | | | | | | |
|----|------|-----|------|---|--|--|---|---|---|---|
| 14 | 0.50 | NBL | 2000 | 4 | Coppicing to 25% of stems to increase structural diversity | | * | | * | |
| 17 | 0.14 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 19 | 0.33 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | * | |
| 20 | 0.25 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | * | |
| 21 | 0.16 | ASP | 1999 | 6 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity | | | | | * |
| 22 | 0.22 | NBL | 1999 | 4 | 25% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity. | | | | | * |
| 23 | 1.15 | NBL | 1995 | 4 | 50% selective thinning designed to restructure developing native broadleaf woodland to increase structural diversity and aid long term production of saleable timber | | | * | | |
| 24 | 1.30 | MBL | - | 4 | 10% selective thinning designed to restructure developing mixed broadleaf woodland to increase age/structural diversity | | * | | | |

8 Costing Operations

Outline projected costs and income over plan period. Please read guidance note for further information.

It is anticipated that the costs of carrying out thinning, coppicing and pruning works will be covered by the commercial activities of Marston Vale Services Ltd which is the trading arm of the Marston Vale Trust and runs the conferencing facilities, shop and café based within The Millennium Country Park. The business is wholly owned by the Marston Vale Trust and any profits made by Marston Vale Services Ltd are returned to the Trust. This has been proven to be a successful model for towards a decade already, and has been cited as a case study of sustainable greenspace creation and management. Where possible, grant aid will be sought where possible and appropriate.

9 Maps

It is recommended that you show as much information on subject based maps as possible. For example, a map showing site constraints or a concept map showing the main proposals.

List all maps here and append to plan:

| Map no./Title | Description |
|---------------|--------------------------|
| 1 | Location Plan |
| 2 | Site plan 1 of 2 |
| 3 | Site plan 2 of 2 |
| 4 | Habitat compartment map |
| 5 | Definitive rights of way |
| 6 | Non-designated paths |
| 7 | Devils toenail location |

N.B. Further maps are contained within the Park's overarching Management Plan located at [Publications | The Forest of Marston Vale | The Forest of Marston Vale](#)

10 Thinning, felling and restocking proposals

The template and guidance should be carefully followed to aid production of a good management plan, and ensure that we can pay the grant.

Most of the template will need to be completed by everyone, but the following sections are not compulsory, unless you wish to apply for woodfuel grants or Category B approval.

- You must complete **Section 10, Table A** if you want to use the plan to gain Wood Fuel WIG support or seek funding through other wood fuel initiatives.

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- You must complete **Section 10, Table B** if you want to gain 10 year thinning and felling approval and / or meet the requirements of Category B.

This section **should not be completed** for any other applications.

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10.2 Table B

This section must be fully completed by the applicant if they wish to gain felling licence approval from the Forestry Commission. The work detailed below must match the proposals set out in the plan. For details on how to complete this table, please refer to **EWGS4 – Woodland Regeneration** for guidance and Tree Felling guidance.

| 4. Cpt. / Sub Cpt. | 5. Area (ha) | 6. % area to be worked | 7. Type of felling | 8. % of felled area comprising: | | 9. Felling licence type | 10. Change in woodland type | | 11. Preferred claim year | 13. Restock mixture | | 14. % Estab. by natural regen | Standard proposals | 12. Notes / Details |
|-----------------------------|--------------------|------------------------------|--------------------------|---------------------------------------|------------|----------------------------------|-----------------------------------|-----------|-----------------------------------|------------------------|------------|--|-----------------------|------------------------|
| | | | | BL | CON | | From | To | | Species | % | | | |
| | | | | <i>1a</i> | <i>2.7</i> | | <i>30%</i> | <i>SF</i> | | - | <i>100</i> | | | |
| 1 | 0.78 | 100 | T | 100 | | U | | | | | | | | |
| 2 | 1.11 | 90 | CF | 100 | | C | NA-NN | Nat | 13/14 | POK | 30 | 0 | | |
| | | | | | | | | | | HAZ | 20 | 0 | | |
| | | | | | | | | | | BI | 20 | 0 | | |
| | | | | | | | | | | NMB | 10 | 0 | | |
| | | | | | | | | | | WSH | 20 | 0 | | |
| 3 | 3.56 | 100 | T | 100 | | U | | | | | | | | |
| 4 | 0.76 | 100 | T | 100 | | U | | | | | | | | |
| 5 | 1.67 | 100 | T | 100 | | U | | | | | | | | |
| 6 | 0.54 | 100 | T | 100 | | U | | | | | | | | |
| 7 | 0.53 | 80 | CF | 100 | | C | NA-NN | Nat | 13/14 | POK | 30 | 0 | | |
| | | | | | | | | | | HAZ | 20 | 0 | | |

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| 4. Cpt. / Sub Cpt. | 5. Area (ha) | 6. % area to be worked | 7. Type of felling | 8. % of felled area comprising: | | 9. Felling licence type | 10. Change in woodland type | | 11. Preferred claim year | 13. Restock mixture | | 14. % Estab. by natural regen | Standard proposals | 12. Notes / Details |
|-----------------------------|--------------------|------------------------------|--------------------------|---------------------------------------|------------|----------------------------------|-----------------------------------|------------|-----------------------------------|------------------------|------------|--|-----------------------|------------------------|
| | | | | BL | CON | | From | To | | Species | % | | | |
| | | | | | | | | | | | | | | |
| <i>1a</i> | <i>2.7</i> | <i>30%</i> | <i>SF</i> | <i>-</i> | <i>100</i> | <i>C</i> | <i>PAWS</i> | <i>Nat</i> | <i>11/12</i> | <i>POK</i> | <i>40%</i> | <i>10%</i> | <i>1(i)</i> | <i>example</i> |
| | | | | | | | | | | BI | 20 | 0 | | |
| | | | | | | | | | | NMB | 10 | 0 | | |
| | | | | | | | | | | WSH | 20 | 0 | | |
| 8 | 0.35 | 100 | T | 100 | | U | | | | | | | | |
| 9 | 1.34 | 100 | T | 100 | | U | | | | | | | | |
| 10 | 0.32 | 100 | T | 100 | | U | | | | | | | | |
| 11 | 0.22 | 100 | T | 100 | | U | | | | | | | | |
| 12 | 0.22 | 100 | T | 100 | | U | | | | | | | | |
| 13 | 0.32 | 100 | T | 100 | | U | | | | | | | | |
| 14 | 0.50 | 100 | FC | 100 | | U | | | | | | | | |
| 15 | 0.79 | 100 | T | 100 | | U | | | | | | | | |
| 16 | 0.98 | 100 | T | 100 | | U | | | | | | | | |
| 17 | 0.14 | 100 | T | 100 | | U | | | | | | | | |
| 18 | 1.93 | 100 | T | 100 | | U | | | | | | | | |
| 19 | 0.33 | 100 | T | 100 | | U | | | | | | | | |

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| 4. Cpt. / Sub Cpt. | 5. Area (ha) | 6. % area to be worked | 7. Type of felling | 8. | | 9. Felling licence type | 10. | | 11. Preferred claim year | 13. | | 14. % Estab. by natural regen | Standard proposals | 12. Notes / Details |
|-----------------------------|--------------------|------------------------------|--------------------------|---------------------------------|------------|----------------------------------|----------------------------|------------|-----------------------------------|------------|------------|--|-----------------------|------------------------|
| | | | | % of felled area comprising: | | | Change in woodland type | | | Species | % | | | |
| | | | | BL | CON | | From | To | | | | | | |
| <i>1a</i> | <i>2.7</i> | <i>30%</i> | <i>SF</i> | - | <i>100</i> | <i>C</i> | <i>PAWS</i> | <i>Nat</i> | <i>11/12</i> | <i>POK</i> | <i>40%</i> | <i>10%</i> | <i>1(i)</i> | <i>example</i> |
| 20 | 0.25 | 100 | T | 100 | | U | | | | | | | | |
| 21 | 0.16 | 100 | T | 100 | | U | | | | | | | | |
| 22 | 0.22 | 100 | T | 100 | | U | | | | | | | | |
| 23 | 1.15 | 100 | T | 100 | | U | | | | | | | | |
| 24 | 1.30 | 100 | T | 100 | | U | | | | | | | | |
| | | | | | | | | | | | | | | |