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What is the South Downs Forest Design Plan?

The ‘South Downs Forest Design Plan’ sets out the medium to long term management objectives for the Forestry Commission woodlands that are situated between Petersfield, in Hampshire and Eastbourne, in East Sussex. These areas are within easy reach of the 10 million people that live within one hour’s drive of the South Downs and provide a backdrop to the lives of the 180,000 people who live there.

Twenty percent of the South Downs is wooded, of which 11% is Ancient Semi-Natural Woodland (ASNW). The major threat to the areas of ancient woodland is management neglect.

The Forestry Commission actively manages over 4000 hectares of woodland within the proposed South Downs National Park, of which 1700 hectares are Plantations on Ancient Woodland Sites (PAWS). The aim is to restore a large proportion of these sites to native species through the South Downs Forest Design Plan.

As part of its remit, the Forestry Commission protects and conserves 29 scheduled archaeological sites across the South Downs. Plans for the management of these sites are set out in the Forest Design Plan, which also outlines proposals for the protection and enhancement of numerous important wildlife and geological sites, including 4 Sites of Special Scientific Interest (SSSIs).

The South Downs Management Plan’ aims to involve everyone in achieving a long-term vision for the South Downs. This vision is reflected in the Forestry Commission’s Forest Design Plan, which recognises that forestry will continue to shape the landscape, providing high quality products and using techniques which protect the soil and water resources. It also sets out strategies that will allow wildlife to share the environment with people.
The South Downs Forest Design Plan (FDP) has been written for the Forestry Commission woodlands that fall between Queen Elizabeth Country Park, in East Hampshire and Friston Forest, in East Sussex. These woodlands are managed by South East England Forest District.

As part of the forest design plan process, stakeholders are invited to participate in the drafting of a design concept. Consultation aims to debate strategic issues relating to the content of the forest design plan and to find a compromise between social, economic and environmental objectives. Records of consultation are kept on file at the forest district office.

The forest design plan is a thirty-year vision for the woodlands for which Forestry Commission (Conservancy) approval is sought for the first ten year period of felling and restocking proposals (2006 to 2016). At this time, outline approval is also sought for the subsequent twenty-year period of proposals (2016 to 2036). The plan will be examined after the first five years (2011) for a review of progress.

English Nature approval is sought for management proposals concerning Sites of Special Scientific Interest (SSSIs). English Heritage approval is sought for management proposals concerning Scheduled Ancient Monuments (SAMs).

Objectives for the South Downs Forest Design Plan

The Forestry Commission’s main objectives for the forest design plan are detailed below. The delivery of these objectives will be examined in detail under each phase of the forest design plan (see Delivery of Forest Design Plan Objectives).

- To demonstrate sustainable use of the woodlands and manage them in accordance with the UK Forest Standard (UKFS), the UK Woodland Assurance Standard (UKWAS) and the Countryside and Rights of Way Act (2000/1).
- To support and enhance biological diversity within the woodlands.
- To protect and enhance special sites for conservation within the woodlands.
- To encourage people to appreciate and enjoy the woodlands in a sustainable way.
- To protect and conserve archaeological interest within the woodlands.
- To ensure that forestry operations take place at a scale and frequency that is in keeping with the surrounding landscape.
- To provide income from the marketing of timber products and the provision of recreation facilities.
- To provide further opportunity for partnership working.
Forestry Commission, England manages its woodland in accordance with five main planning documents that apply at the following levels:

<table>
<thead>
<tr>
<th>Level</th>
<th>Document name</th>
<th>Document purpose</th>
<th>Intended audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The National Level</td>
<td>The England Forestry Strategy.</td>
<td>Describes how the Government will deliver its forestry policies in England and sets out the Government’s priorities for the next five to ten years.</td>
<td>Local Forestry Commission area team; key stakeholders; statutory consultees; the general public.</td>
</tr>
<tr>
<td>2. The Regional Level</td>
<td>The Forestry and Woodlands Framework for South East England.</td>
<td>Provides a regional expression of the national England Forestry Strategy, describing priorities and programmes for using trees, woodlands and forestry to help meet the needs of the South East.</td>
<td>Local Forestry Commission area team; key stakeholders; statutory consultees; the general public.</td>
</tr>
<tr>
<td>3. The District Level</td>
<td>The Forest District Strategic Plan.</td>
<td>Serves as a guide to the management of woodlands within South East England Forest District. It divides the district into zones for the purpose of management and ensures that forestry activities reflect the local ecological, social and cultural individuality of woodland. Strategic objectives for each zone are presented within the context of the Government’s strategic priorities for forestry in England (e.g. forestry for rural development; forestry for economic regeneration; forestry for recreation, access and tourism and forestry for the environment and conservation).</td>
<td>Local Forestry Commission area team; key stakeholders; statutory consultees; the general public.</td>
</tr>
<tr>
<td>4. The Woodland Level</td>
<td>The Forest Design Plan.</td>
<td>Takes a holistic view of management at the landscape scale, outlining the medium to long term management objectives for each woodland and presenting a balanced approach to the future management of the forest.</td>
<td>Local Forestry Commission area team; key stakeholders; statutory consultees; the general public.</td>
</tr>
<tr>
<td>5. The Site Level</td>
<td>The Site Plan (OSA).</td>
<td>Created by the Operational Site Assessment (OSA) process. Each major forest operation has its own OSA. At this stage, a visit is made by local staff who identify site specific interests and outline the constraints and opportunities that are relevant to the site at a level of detail that is inappropriate in a FDP.</td>
<td>Local Forestry Commission area team; invited key stakeholders.</td>
</tr>
</tbody>
</table>
Design Brief for the South Downs Forest Design Plan

The Design Brief outlines the main objectives and considerations for a woodland prior to the development of the Forest Design Plan. The brief is written before the consultation process begins and provides a basis for people who are unfamiliar with the wood to work from.

The Forestry Commission manages over 4000 hectares of woodland that is divided between 14 main blocks that fall between the towns of Petersfield in Hampshire and Eastbourne in East Sussex. The strongest influences on the future management of these woodlands are:

1. The underlying chalk soils typical of downland.
2. The presence of ancient woodland sites that have been planted with both native and non-native tree species (PAWS sites).
3. The presence of an intact relict landscape within Queen Elizabeth Country Park.
4. The designation of 4 Sites Of Special Scientific Interest (SSSIs).
5. The prominence of the woodland blocks in the surrounding landscape.
6. The high number of visitors that use the woodlands.

The main objectives for management fall within the environmental, economic and social categories.

Environmental considerations

- 1 National Park designation (proposed).
- 2 Areas of Outstanding Natural Beauty (AONBs).
- 1 Special Area of Conservation (SAC).
- 1 Environmentally Sensitive Area (ESA).
- 1700 hectares of Plantations on Ancient Woodland Sites (PAWS).
- 29 Scheduled Ancient Monuments (SAMs).
- 4 Sites of Special Scientific Interest (SSSIs).
- 2 National Nature Reserves (NNRs).

Economic considerations

- Woodland is predominantly beech (62%) with scattered yew.
- Majority of existing woodland is 40 to 70 years of age.
- Yew can be up to 260 years of age.
- Ash and birch regenerate freely in gaps in the canopy.
- Yield classes range from YC6 for broadleaf species to YC12 for Corsican pine, YC16 for Norway spruce and YC20 for western red cedar.
- Shallow rooting species are prone to windthrow across the thin chalk soils.
- Vehicular access is limited in some woodland blocks.
- Queen Elizabeth Country Park is managed in partnership with Hampshire County Council.

Social considerations

- 10 million people live within 1 hour’s drive of the South Downs.
- Queen Elizabeth Country Park contains a visitor centre and 20 miles of trails.
- Queen Elizabeth Country Park receives 300,000 visitors per year.
- Wilmington Forest contains a lake.
- Proposed South East Plan and increasing pressure for countryside access.

Other considerations

- Over 3000 hectares are leasehold land.
- Over 1000 hectares are freehold land.
Overview of the South Downs Forest Design Plan Area

The South Downs are renowned for their varied scenic beauty, from rolling chalk uplands, steep escarpments and chalk cliffs to wooded greensand ridges, hidden ghylls, river valleys and enclosed fields and hedges at the foot of the chalk hills.

The Forestry Commission manages 4146 hectares of woodland in the area that stretches between Petersfield, in East Hampshire and Eastbourne, in East Sussex. 1111 hectares of this is freehold woodland and 3035 hectares is leased to the Forestry Commission.

The South Downs woodlands are predominantly beech in character (62%), with blocks of non-native conifer, scattered yew and a proportion of open space. Ash and birch regenerate freely in gaps created in the existing canopy, whilst the shallow rooting conifer species are prone to windthrow.

Yield classes range from yield class (YC) 6 for the broadleaf species to YC 12 for Corsican pine, YC 16 for Norway spruce and YC 20 for western red cedar.

The majority of the woodlands are aged between 40 and 70 years of age, with areas of yew that have been growing for up to 260 years.

The woodlands contain the following designations:

A Special Area of Conservation (SAC) at Kingley Vale (154 ha).
A National Nature Reserve (NNR) at Kingley Vale (154 ha).
A National Nature Reserve (NNR) at Lullington Heath (63ha).
4 Sites of Special Scientific Interest (SSSIs).
29 Scheduled Ancient Monuments (SAMs).
The South Downs Environmentally Sensitive Area (ESA).
The East Hampshire Area of Outstanding Natural Beauty (AONB).
The Sussex Downs Area of Outstanding Natural Beauty (AONB).

Mean annual rainfall across the southern England region is 781mm.
Temperatures range from 6°C to 14°C (Met Office 1971-2000 averages).

*Permanent and temporary open space includes the open space created alongside tracks and streams. It also includes the cyclical open space created by felling operations.
Each of the woodland blocks within the South Downs Forest Design Plan area have their own set of characteristics (see tables below) and will be examined in the following three phases:

### Phase 1. Queen Elizabeth Country Park to West Harting Down.

Includes Queen Elizabeth Country Park, Head Down Plantation, Ditcham Woods and West Harting Down on the Hampshire/West Sussex county border.

<table>
<thead>
<tr>
<th>Point in time</th>
<th>Habitat type</th>
<th>ASNW</th>
<th>PAWS</th>
<th>Permanent Open space</th>
<th>Limited intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 2006</td>
<td></td>
<td>0.6</td>
<td>24.5</td>
<td>5.4</td>
<td>0</td>
</tr>
<tr>
<td>At 2036</td>
<td></td>
<td>14</td>
<td>18</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

### Phase 2. Marden to Houghton.


<table>
<thead>
<tr>
<th>Point in time</th>
<th>Habitat type</th>
<th>ASNW</th>
<th>PAWS</th>
<th>Permanent Open space</th>
<th>Limited intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 2006</td>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>At 2036</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Phase 3. Friston

Includes: Friston Forest.

<table>
<thead>
<tr>
<th>Point in time</th>
<th>Habitat type</th>
<th>ASNW</th>
<th>PAWS</th>
<th>Permanent Open space</th>
<th>Limited intervention</th>
</tr>
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<tr>
<td>At 2006</td>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>At 2036</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>
Natural regeneration of native broadleaf species in Queen Elizabeth Country Park
**Queen Elizabeth Country Park to West Harting Down**

**Date of commencement of the plan:** 01/12/2006  
**Expiry date:** 30/11/2016  
**First review date:** 01/12/2011

<table>
<thead>
<tr>
<th>Activity in Phase 1 Area (Total 911 ha) in first 10 years &amp; subsequent 20 year period</th>
<th>Area (ha)</th>
<th>Conifer high forest</th>
<th>Broadleaf restock natural regeneration</th>
<th>Conversion to open chalk grassland habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clearfell in period 2005-15</strong></td>
<td>62</td>
<td>55</td>
<td></td>
<td>7.4 (in WH Down)</td>
</tr>
<tr>
<td><strong>Clearfell in period 2015-35</strong></td>
<td>58</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Broadleaf regeneration coupes in period 2005-15</strong></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Broadleaf regeneration coupes in period 2015-35</strong></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td><strong>Management of areas under Low Impact Silvicultural Systems</strong></td>
<td></td>
<td></td>
<td></td>
<td>728</td>
</tr>
<tr>
<td><strong>Management of areas by limited intervention</strong></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjustment to felling coupe boundaries</th>
<th>Timing of Restocking</th>
<th>Changes to species</th>
<th>Windthrow clearance</th>
<th>Changes to road lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC Approval normally not required</td>
<td>0.5 ha or 5% of coupe - whichever is less</td>
<td>Up to 2 planting seasons after felling</td>
<td>Change within species group e.g. evergreen conifers; broadleaves</td>
<td>Up to 0.5ha</td>
</tr>
<tr>
<td>Approval by exchange of letters and map</td>
<td>0.5ha to 2ha or 10% of coupe - whichever is less</td>
<td></td>
<td></td>
<td>Additional felling of trees not agreed in plan</td>
</tr>
<tr>
<td>Approval by formal plan amendment</td>
<td>&gt;2ha or 10% of coupe</td>
<td>Over 2 planting seasons after felling</td>
<td>Change from specified native species</td>
<td>&gt;5ha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Change between species groups</td>
<td>As above, depending on sensitivity</td>
</tr>
</tbody>
</table>

**Signed ..................................................**  
**FOREST DISTRICT MANAGER**  
**Date .................................**

**Signed ..................................................**  
**CONSERVATOR**  
**Date .................................**
1.0 Survey Information for Queen Elizabeth Country Park to West Harting Down

1.1 Location and Ownership

Queen Elizabeth Country Park, Head Down Plantation, Ditcham Woods and West Harting Down lie approximately 3 miles to the south of Petersfield on the Hampshire/West Sussex county border. The four woodland blocks cover 911 hectares and fall within a notional 6x6km square, marked out by the villages of Bariton, South Harting, Compton and Chalton.

Queen Elizabeth Country Park was formally opened by Her Majesty the Queen in 1976, when the Forestry Commission and Hampshire County Council formed a management partnership. The land to the east of the A3 is owned by the Forestry Commission, while Butser Hill to the west of the A3 is owned by Hampshire County Council.

Head Down Plantation (448ha) and West Harting Down (269ha) are both Forestry Commission freehold woodlands, managed by South East England Forest District.

An area of 50 ha, known as ‘Barnett Copse’, in the southern part of West Harting Down is leasehold woodland, with reserved sporting rights. A right of way is reserved by the Lessor to access fields in the centre of Barnett Copse.

Ditcham Woods are also leasehold woodland (145ha) with reserved sporting rights.

Reference: Location Map and Legal Status Map.

1.2 Site Characteristics

Queen Elizabeth Country Park, Head Down Plantation, Ditcham Woods and West Harting Down are located in the west of the South Downs.

The four woodland blocks lie on a composite of several rock lithologies and contain chalk, including red chalk. The northern most part of Ditcham Wood, located to the north of the South Downs Way and known as ‘The Miscombe’, lies on Upper greensand and gault.

Strong westerly winds affect the growth and stability of trees in the north-west parts of West Harting Down and the south-west parts of Queen Elizabeth Country Park.

Queen Elizabeth Country Park lies adjacent to managed chalk grassland and comprises largely of beech plantation with blocks of western red cedar, Norway spruce and ash.

In Head Down Plantation, western red cedar has been planted in mixture with beech, ash and yew.

In Ditcham Woods, beech is the predominant species.

West Harting Down contains a mixture of beech with blocks of spruce, western red cedar and pine that are not well suited to the chalk soils and have been planted on ancient woodland sites in the southern half of the woodland. In these parts, conifer crops provide a dense canopy with limited habitat diversity. Blocks of yew can also be found in the centre of the woodland.

Reference: Existing Species Map.
Species Composition within Phase One Woodlands at the Start of the Forest Design Plan - April 2006

Species Composition within Phase One Woodlands at the End of the Forest Design Plan - April 2036

Source GIS.

* Permanent and temporary open space includes the open space created alongside roads, tracks and streams. It also includes the cyclical open space created by felling operations.

The restoration of these woodlands to native broadleaves will be part of a long-term process that is likely to continue beyond the end of this plan period.

* Permanent open space includes the open space created alongside roads, tracks and streams. It does not include the cyclical open space created by felling operations carried out in clearfell coupes, native broadleaf regeneration coupes or areas managed using low impact silvicultural systems.
1.3 Conservation

1.3.1 Existing habitats

Queen Elizabeth Country Park, Head Down Plantation, Ditcham Woods and West Harting Down support 264 hectares of Plantations on Ancient Woodland Sites (PAWS) and 6.5 hectares of Ancient and Semi-Natural Woodland (ASNW). The majority of these woodlands are characteristic of the NVC Communities W12 and W12b (beech woodland). There are also smaller areas that display NVC Community W8 (ash woodland), W13 (yew woodland) or W14 (pine woodland) characteristics.

Prior to 1928, the areas known as Holt and War Down in Queen Elizabeth Country Park supported a mixture of chalk grassland, that was grazed by sheep and cattle, and areas of native scrub and yew woodland. In 1928, the Forestry Commission purchased this land for the planting of trees for timber.

The forest blocks within Queen Elizabeth Country Park now provide a variety of habitats ranging from beech plantation and hazel coppice to conifer plantation and areas of open space.

Reference: Ancient Woodland Map.

1.3.2 Site of Special Scientific Interest (SSSI)

The West Harting Down SSSI covers 13.9ha and was notified in 1980 and 1985 under Section 28 of the Wildlife and Countryside Act 1981. This area of mature woodland lies on Upper Chalk of the South Downs and is chiefly composed of mature yew *Taxus baccata* trees, many of which are over one hundred years old. Developing yew scrub and small areas of chalk grassland are also features of the site, although regeneration of yew is absent at present.

English Nature is the Government agency that works with land managers to conserve important wildlife and geological sites. It recognises that the yew stands within West Harting Down are currently isolated and even-aged. The local English Nature team has recommended that these islands of yew be allowed to develop into a mature yew woodland habitat, where natural processes are allowed to take place. This could be brought about by felling the beech plantation found growing between and adjacent to the existing blocks of yew to create an open chalk habitat. With planned deer control, the yew would then have the opportunity to colonise these open areas. Once there is clear evidence of the expansion of the existing yew woodland, then the potential for felling a percentage of yew trees from within the SSSI may arise. This would provide high quality timber to support both large and small users of such high quality products. In the long term, it may be beneficial to include the area to the north of the SSSI in this management prescription.

Reference: Constraints and Opportunities Map.

1.3.3 Open space within the woodland

Approximately 4% of the woodland area included in Phase One of this forest design plan is open space (at 2006). This figure includes both the cyclical open space created by felling operations and the permanent open space that exists alongside roads, tracks, recreation facilities and ancient monuments. A number of open areas exist within Queen Elizabeth Country Park and have been managed for open habitat since 1987. These areas attract breeding nightjar, breeding tree pipits and visiting Dartford warbler. They also support an array of invertebrate fauna.

The creation and sensitive management of open habitats within a woodland introduces greater habitat diversity. This encourages a wider range of species that require early successional growth and adds diversity and interest for all types of recreation and sporting activities. Many species make regular use of the edge habitats for feeding due to higher herb layer productivity and larger invertebrate populations. Wider rides are generally drier and therefore maintain a better surface for all year round access.

The diagram below shows a typical woodland ride with its habitat zones. A similar approach should be used within glades.

1.4 Recreation

Queen Elizabeth Country Park is managed as a partnership by the Forestry Commission and the Hampshire County Council Countryside Service. It is Hampshire’s biggest country park, offering 20 miles of trails for walkers, cyclists & horse-riders. The park includes the Butser Hill National Nature Reserve, the highest point on the South Downs, and 567 ha of open access woodland and downland (including Head Down Plantation).

Queen Elizabeth Country Park contains a visitor centre, shop, café and theatre that provide a point of orientation for visitors to the forest. Way-marked trails and the associated barbeque and play facilities are maintained to encourage visitors to appreciate and enjoy the surrounding woodland and chalk grassland.

The trees that surround the forest drive, car parks, play and picnic areas form an integral part of these recreation facilities. Trees within these areas should therefore be selected for retention or removal on an individual basis, with the primary aim of increasing the recreation value of the woodland.

The South Downs Way is a 161 kilometre National Trail (bridleway) that passes through Queen Elizabeth Country Park and to the north of Head Down Plantation, Ditcham Woods and West Harting Down. QECP is also the start point for the 12 mile Staunton Way and the end point for the 21 mile Hangers Way. West Harting Down is situated on the route of the 240 kilometre Sussex Border Path.

Recreation pressure within Head Down Plantation is limited to permissive activities, e.g. off-road driving and orienteering.

Recreation pressure within Ditcham Woods is low.

West Harting Down is popular with local dog walkers and horse-riders. The public footpath within this wood suffers inappropriate use by horse-riders establishing a link between the Sussex Border Path and South Downs Way. Use of this public footpath by horses should be discouraged through ranger presence.

1.5 Landscape

Queen Elizabeth Country Park is prominent in the landscape when seen by visitors to Butser Hill and by motorists travelling north and south along the A3 London to Portsmouth highway to the immediate west of the woodland. While the A3 affords good vehicular access to the visitor centre, it also creates significant traffic noise and detaches QECP from Butser Hill to the west.

QECP ranges from 110-244m a.s.l. and contains a number of internal viewpoints that look out over the surrounding landscape. These have become obscured by vegetation over time and should be maintained during normal forestry operations.

Head Down Plantation and Ditcham Woods are visible from the London to Portsmouth railway line that runs between the two woodland blocks.

West Harting Down is prominent in the landscape when seen from Ditcham Park School (to the west) and the South Downs Way (to the north east). It ranges from 80-215m a.s.l. and borders surrounding woodland and hedgerow habitat. The higher ground in the north of West Harting Down provides significant views out to the Solent and Isle of Wight. In order to preserve this internal viewpoint, it would be necessary to manage the height or density of the young beech crop found growing to the north of the SSSI.
1.6 Heritage

English Heritage is a statutory advisor to the Government that works with landowners to conserve and enhance the historic environment. Forestry Commission staff liaise with the local English Heritage team to ensure that Scheduled Ancient Monuments are protected during forestry operations and managed in accordance with their associated management plans. Staff also seek advice on the management of Unscheduled Ancient Monuments.

In addition to the unscheduled archaeological sites found within Queen Elizabeth Country Park and West Harting Down, Queen Elizabeth Country Park contains an extensive area of scheduled archaeology covering 31.4 hectares (Scheduled Ancient Monument No. 33959). In 1997, the Queen Elizabeth Country Park Archaeological Earthwork Survey was carried out over 20 hectares, with ‘Holt Down Roman Villa’ at its centre (grid ref: SU 721 176). It identified earthworks that consisted of lynchets, holloways, ponds, drystone structures and possible barrow mounds. Lynchets were the most numerous and prominent of the archaeological features. They are an important indicator of the extent and intensity of past agricultural activity.

The site of the Roman villa and surrounding land was grazed by sheep and cattle prior to 1928 when the Forestry Commission purchased the land to plant trees. However, the conifer plantations in this part of the forest are now prone to endemic windthrow, which poses the risk of damage to the archaeological interest.

Queen Elizabeth Country Park also contains part of the site of a Romano-British village at grid ref: SU 734 173.

West Harting Down contains a Bronze Age cross dyke (Scheduled Ancient Monument No. 29276) at grid ref: SU 764 184.

Reference: Constraints and Opportunities Map.
Butser Downs (1940) Showing Queen Elizabeth Country Park Prior to Afforestation.
Silvicultural systems will aim to create a more diverse woodland in terms of species and age class structure (see Design Concept Map). This will be done by encouraging site-native species to regenerate over time within existing beech plantation. Non-native species will be removed from ancient woodland sites and replaced by native trees. Permanent open space will be maintained through the management of existing open habitat, including road and ride-side vegetation. It will also come about through the clearance and subsequent management of parts of Scheduled Ancient Monuments, internal viewpoints and recreation facilities.

Trees surrounding formal visitor facilities in QECP will be selected for retention or removal on an individual tree basis to increase the recreation value of the woodland.

Both clearfell and low impact silvicultural system (LISS) operations will create temporary open space habitat, with early successional vegetation, during the establishment of natural regeneration.

- In those areas where 61-100% of the woodland canopy consists of non-native species, the area will be restored to native woodland through clearfelling.
- In those areas where 41-60% of the woodland canopy is represented by non-native species, the area will be restored through native broadleaf regeneration felling.
- In clearfell operations and native broadleaf regeneration felling, all non-native species and site-native species that are unlikely to remain standing will be removed. All other existing site-native species will be retained to provide a source of seed, continuity of forest cover in the wider landscape and potential veteran trees.
- Detailed site plans will be prepared prior to harvesting operations in the form of the Operational Site Assessment (OSA).
- Management will retain a minimum of 3 standing and 3 fallen stems per hectare (preferably over 15cm diameter) to create deadwood habitat within the woodland.
- Potential veteran trees will be identified and retained into perpetuity.
- Clearfell coupes will be designed to fit in with the scale and underlying landform of the surrounding countryside.
- The timing of clearfell coupes (see the Habitat Restoration and Felling Map) has been carefully considered to increase species and age class diversity within the woodlands. However, this timetable assumes that sufficient natural regeneration of native species will be obtained over the areas that have been felled, before successive coupes are removed. In the absence of sufficient natural regeneration, the timing of successive clearfell coupes will need to be adjusted.

- Where 0-40% of the existing woodland canopy is represented by non-native species and adequate native seed trees exist, the area will be restored to native woodland through the use of Low Impact Silvicultural Systems (LISS). These systems will also be applied to the area of scheduled archaeology on Holt Down in Queen Elizabeth Country Park.
- Low impact silvicultural systems will include the gradual removal of non-native species and the use of regeneration felling and thinning in blocks of site-native species.
- Low impact silvicultural systems will create adequate light levels for the regeneration of site-native species.
- Management will consider the visual effect of low impact silvicultural systems (e.g. group regeneration felling) on the wider landscape.
- Low impact silvicultural systems will over time create a complex stand structure with varying canopy layers and temporary open space. This will increase habitat and visual diversity within the woodlands.
- Management will retain a minimum of 3 standing and 3 fallen stems per hectare (preferably over 15cm diameter) to create deadwood habitat within the woodland.
- Potential veteran trees will be identified and retained into perpetuity.
- Trees found growing between and adjacent to the existing blocks of yew in West Harting Down will be removed to create an open chalk habitat. Opportunity will be given for the yew to colonise these open areas.

- A proportion of those areas which are predominantly wooded and of particularly high wildlife interest or potential will be permanently identified and managed by limited intervention (unless alternative management has a higher conservation or biodiversity value). In these ‘natural reserves’, a number of site-native trees will be retained into perpetuity and allowed to reach their biological maturity. A proportion of site-native trees may also be ring-barked to provide deadwood habitat within the existing woodland.
- Natural reserves will contain woodland habitats that will be managed sympathetically to minimise any adverse effects on mature/veteran trees. Forestry operations will only be carried out to increase the biodiversity value of the woodland, to ensure the health of the woodland (e.g. to reduce the spread of disease or control exotic plants) or to ensure the health and safety of the public or forest workers.
South East England Forest District
QECF, Head Down Plantation,
Ditcham Woods & West Harting Down

Silvicultural Systems Map
Indicates the silvicultural systems that will be used to restructuring and regenerate the woodland over time.

- Limited intervention management
- Low impact silvicultural systems
- Clearfell or native broadleaf regeneration felling
- Management area
- Compartments

Produced for the Planning Team
July 2009
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1:25,000
Yew on site of Roman villa in Queen Elizabeth Country Park
## 3.0 Contribution of Phase One area (Queen Elizabeth Country Park to West Harting Down) to overall Forest Design Plan objectives.

<table>
<thead>
<tr>
<th>Forest Design Plan Objectives</th>
<th>Indicators of objectives being met</th>
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</table>
| **To promote sustainable use of the woodlands.** | - Mammals are controlled where necessary to allow natural regeneration of site-native trees to establish successfully.  
- Sufficient natural regeneration of site-native species is allowed to establish in clearfelled areas before adjacent coupes are harvested. |
| **To support and enhance biological diversity within the woodlands.** | - Existing beech plantation is made more diverse in age and species structure by encouraging other site-native species to regenerate over time within the existing canopy.  
- PAWS are restored to native woodland through clearfell and native broadleaf regeneration felling.  
- Low impact silvicultural systems are applied in areas with more than 60% native woodland cover to increase habitat diversity within the forest.  
- Vegetation alongside roads and tracks is managed to provide permanent open space in the form of edge habitats.  
- Temporary open space is created through both clearfell and low impact silvicultural systems.  
- Site-native species are retained across areas that have had native broadleaf regeneration felling to provide a source of seed and ensure continuity of forest cover in the landscape.  
- Potential veteran trees are identified across the forest and retained into perpetuity.  
- Parts of Holt Down in QECP are cleared of trees to protect important archaeological sites and to provide chalk grassland habitat within the woodland.  
- A minimum of 3 standing and 3 fallen stems per hectare (preferably over 15cm diameter) are retained to create deadwood habitat within the woodland, including clearfell sites. |
| **To protect and enhance special sites for conservation within the woodlands.** | - Trees found growing between and adjacent to the existing blocks of yew in and around West Harting Down SSSI are removed to create open chalk habitat. Opportunity is given for the yew to colonise these open areas.  
- A proportion of those wooded areas of particularly high wildlife interest or potential are identified as ‘natural reserves’ and managed by limited intervention, unless alternative management has a higher conservation value. |

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<tr>
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| **To encourage people to appreciate and enjoy the woodlands in a sustainable way.** | - Woodland is managed for habitat and species diversity, which continues to attract visitors.  
- Low impact silvicultural systems are applied in areas with more than 60% native woodland cover to increase visual diversity within the forest.  
- Trees surrounding key visitor facilities (e.g. barbecue sites) are managed to enhance the recreation value of the woodland.  
- Formal recreation opportunities are provided within QECP.  
- Informal recreation is encouraged in the freehold woodland blocks outside of QECP.  
- Internal viewpoints are managed to maintain views over the surrounding landscape. |
| **To protect and conserve archaeological interest within the woodlands.** | - Scheduled archaeological monuments (SAMs) are managed according to management plans agreed with English Heritage.  
- Unscheduled ancient monuments are protected during forest operations. |
| **To ensure that forestry operations take place at a scale and frequency that is in keeping with the surrounding landscape.** | - Clearfell coupes are designed to fit in with the scale and underlying landform of the surrounding countryside.  
- Low impact silvicultural system coupes maintain the integrity of forest cover in the wider landscape.  
- Timing of clearfell coupes is designed to increase habitat diversity and visual diversity within the woodlands. |
| **To provide income from the marketing of timber products and the provision of recreation facilities.** | - Timber products are produced through sustainable thinning of the forest (except in ‘natural reserves’) and from clearfell and low impact silvicultural system harvesting operations.  
- Recreation facilities and adjacent woodland are managed to sustain visitor use of the forest. |
| **To provide further opportunity for partnership working.** | - Possibilities are explored for the clearance of trees from Holt Down to protect the Roman villa and its associated features, to reveal an historic landscape and to restore a mixture of chalk heath and chalk grass habitats. |
4.0 Glossary of Terms

Ancient woodland sites
Sites which have been continuously wooded since before 1600 AD in England. Some of these woodlands may be primary (i.e. remnants of our prehistoric woodlands) and others will have arisen as secondary woodland on ground cleared sometime prior to 1600 AD. Ancient refers to the history of the site as woodland.

Ancient semi-natural woodland
An ancient woodland where the trees and shrubs are semi-natural, i.e. predominantly composed of trees and shrubs that are native to the site and are not obviously planted.

Biological Diversity
The richness and variety of wildlife and habitats.

Canopy
The mass of foliage and branches formed collectively by the crowns of trees.

Compartments
Permanent management units of land within a forest, divided into sub-compartments.

Coupes
Areas of forest that have or will be clear felled.

England Forestry Strategy
Describes how the Government will deliver its forestry policies in England and sets out the Government’s priorities for the next five to ten years.

Forestry Commission Guidelines
Outline the principles and standards of good management practices in forests and woodlands to enable landowners, land managers and their advisors to satisfy Forestry Commission policy.

Forest District Environmental Planning Procedure (Op’s 1)
Detailed site plans that are prepared in advance of all major forest operations and identify site constraints, opportunities and areas requiring special treatment or protection.

Group regeneration system
A management system that allows young crops to become established under the side shelter of existing crops. Several areas of 0.1 to 0.5 ha are felled across an area to bring about natural regeneration on the ground beneath the existing tree crop. Once adequate regeneration has been achieved in these gaps, further groups of trees are removed and the cycle is repeated until the desired area is completely regenerated.

Habitat Action Plans
UK wide plans for priority habitats defined under the UK Biodiversity Action Plan. They contain quantitative targets for conserving, restoring and expanding the habitats.

Marginal thinning intensity
The maximum volume of timber per ha that can be removed each year without incurring any loss of cumulative volume production over the rotation of a crop. This is defined as approximately 70% of the yield class per year for most species and the volume is often removed on a cycle. For example, for a crop of yield class 14, thinning to marginal intensity would remove 9.8 m$^3$ per ha per year (or 49 m$^3$ per ha on a 5 year cycle).

Native woodland
Woodland containing tree and shrub species which colonised Britain unaided by the influence of man after the last Ice Age.

Natural regeneration
The growth of trees from seed found in the soil.

Non-native species
Trees and shrubs that have been introduced to the UK by the activities of man. Also used to describe species not native to the site and locality.

Plantations on Ancient Woodland Sites (PAWS)
Planted woodlands of any species on ancient woodland sites.
Red Data Book species
Species that are included on Red Data lists published by the Joint Nature Conservation Committee (JNCC). The lists are based on a global system developed by the International Union for Conservation of Nature and Natural resources (IUCN) for classifying species according to their extinction risk.

Restocking
The re-establishment of trees where felling has taken place. Restocking may be achieved through natural regeneration or by planting.

Ride
Forestry term for roads, paths and tracks within a woodland.

Semi-natural woodland
A woodland predominantly composed of trees and shrubs that are native to the site and are not obviously planted.

Species Action Plan
A conservation plan under the UK Biodiversity Action Plan for species based upon knowledge of its ecological and other requirements, which identifies the action needed to stabilise and improve its status.

SSSI
Site of Special Scientific Interest.

Sub-compartments
Areas of forest comprising a more or less homogeneous crop in terms of age, species composition and condition. Their boundaries may change as the forest develops after felling and restocking.

Strategic Plan
Serves as a guide to the management of woodlands within South East England Forest District. It divides the district into zones for the purpose of management and ensures that forestry activities reflect the local ecological, social and cultural individuality of woodland. Strategic objectives for each zone are presented within the context of the Government’s strategic priorities for forestry in England (e.g. forestry for rural development; forestry for economic regeneration; forestry for recreation, access and tourism and forestry for the environment and conservation).

Thinning
The removal of a proportion of the trees in a sub-compartment to improve the quality of the remaining trees, accelerate individual tree growth and provide income.

UK Biodiversity Action Plan
The UK government response to the Convention on Biological Diversity at Rio de Janeiro: includes actions to safeguard key habitats and species.

UK Forestry Standard
Outlines the Government’s criteria and standards for the sustainable management of forests in the UK.

UK Woodland Assurance Scheme (UKWAS)
A voluntary scheme for the independent assessment of forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to the growing consumer demand for timber products from sustainably managed forests. It has been designed to ensure that it reflects the requirements of both the Government's UK Forestry Standard - and through this the guidelines adopted by European Forestry Ministers at Helsinki in 1993 - and the Forest Stewardship Council’s (FSC’s) GB Standard.

Uniform Shelterwood System
A management system that allows young crops to become established under the overhead shelter of existing crops. The existing tree crop is evenly and gradually removed over time in successive regeneration fellings to bring about natural regeneration on the ground beneath.

Veteran tree
A tree that is of interest biologically, aesthetically or culturally because of its age, or a tree that is in the ancient stage of its life, or a tree that is old relative to others of the same species.

Windthrow
Uprooting or breakage of trees caused by strong winds.

Yield Class
Indicates the growth rate of a tree crop and is defined as the point in time where the mean annual increment (MAI) of a crop reaches a maximum. This is the maximum average rate of volume increment that a particular crop can achieve and this indicates the yield class. For example, a crop capable of a maximum annual increment of 14 m³ per ha has a yield class of 14.
5.0 Record of Amendments

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Four blocks of woodland situated 5km to the south of Petersfield on the Hampshire/West Sussex border.

QECP is prominent in the landscape when viewed from Butser hill and the A3 highway.

West Harting Down is visible from Ditcham Park school and the South Downs Way.

Head Down Plantation and Ditcham Woods can be seen from the London to Portsmouth railway line.

The woodland blocks are predominantly beech in character with a significant proportion of PAWS.
Indicative of ancient woodland ownership

- Management area
- FE-managed ancient and semi-natural woodland (ASNW)
- FE-managed plantations on ancient woodland sites (PAWS)
- Ancient and semi-natural woodlands that are outside FE management
- FE-managed woodlands that are not on ancient woodland sites
South East England Forest District

QECP, Head Down Plantation, Ditcham Woods & West Harting Down

Existing Species Map

Schematic representation of existing species. Indicates species content of subcompartments, rather than exact distribution of species.

- Compartments
- Water Course
- Open water
- Scots pine
- Corsican pine
- Other conifer species
- Spruce
- Oak
- Beech
- Ash
- Other broadleaf species
- Open space

Produced by the Planning Team

July 2006

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Map Showing Areas of Archaeological Interest

- **Management area**
- **Compartments**
- **Sub-compartments**
- **Rides and tracks**
- **Forest roads**

**Highly sensitive and significant earthworks.** Keep heavy machinery away from these areas. Ensure that trees fall away from these areas in felling operations where possible.

**Sensitive earthworks.** Keep heavy machinery away from these areas.

Produced by the Planning Team July 2006

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Manage the trees and open space within this area to increase its recreation value.

Manage QECP as a core area for public recreation. Encourage visitors to appreciate and enjoy the surrounding woodland and chalk habitats.

Use Head Down Plantation for specialist permit activities such as off-road driving and orienteering.

Protect the archaeological interest across the Scheduled Ancient Monument by removing trees from the most sensitive sites, e.g. Roman Villas, ponds and drystone walls. Manage these areas for open grass and heath habitats with scattered native trees.

Reduce thinning intensity where the threat of windthrow in existing conifer woodland is at its highest, i.e. in trees exposed to the prevailing wind and on the most shallow soils (SW parts of Holt Down).

Maintain continuous forest cover across Holt Down, encouraging the colonisation of native broadleaf species in gaps created in the existing canopy.

Explore the potential for Holt Down to contribute to a future landscape scale restoration project. Such a project might focus on the outcomes of archaeological protection, habitat restoration and visitor enjoyment, delivered through joined-up working and funding.

South East England Forest District
West Harting Down

Design Concept
Illustrates the main features and broad character of the woodland at the end of the implementation of the plan

- Forest road
- Rides and tracks
- Overhead wayleave
- Management area
- Site of Special Scientific Interest (SSSI)
- Predominantly beech. Remove non-native species from these areas using low impact silvicultural systems. Allow native broadleaves and yew to regenerate in the gaps created in the existing canopy.
- Predominantly conifer. Remove non-native species from these areas using clearfell or native broadleaf regeneration felling. Replace with native broadleaves and yew.
- Retain native broadleaves to provide a source of seed. Manage using low impact silvicultural systems.
- Manage areas of permanent open space to benefit public recreation and increase habitat diversity.
- Neighbouring woodland/hedgerow
- Viewpoint

SSSI. Remove beech and non-native conifer found growing between and adjacent to groups of yew to create an open chalk habitat for yew to colonise.

Apply the same treatment to this area as the SSSI. Aim to extend the boundary of the SSSI to include this area in the long term.

Retain views to the south and west by managing the height of the existing young beech plantation.

SSSI buffer zone. Retain mature yew that is scattered throughout this area and encourage its regeneration.
Retain Atlas cedar in this area

Reduce thinning intensity where threat of windthrow is highest (SW parts of Holt Down)
Indicative of the structure of the woodlands at the end of the plan period (2036)

*Temporary open space will exist throughout much of the woodland area as a result of management systems that make use of alternative to clearfell techniques. These will involve the selective felling of groups and single trees to bring about the natural regeneration of native species.
Habitat Restoration and Felling Map
Illustrates timing of felling and management proposals

Clearfell Coupes
- 2002-2006
- 2007-2011
- 2012-2016
- 2017-2021
- 2022-2026
- 2027-2031
- 2032-2036
- Beyond 2042

Native broadleaf regeneration coupes
- 2002-2006
- 2007-2011
- 2012-2016
- 2017-2021
- 2022-2026
- 2027-2031
- 2032-2036
- Beyond 2042

Low Impact Silvicultural Systems Specific to this Plan
(Remove a maximum of 50% of the canopy in any one operation)
- Permanent open space.
- Allow native broadleaf regeneration amongst the existing conifer crop & thin to favour site-native species.
- Carry out group regeneration fellings in areas of pure broadleaf & remove non-native conifer in other areas to encourage the regeneration of site-native species.
- Remove conifer in a series of uniform regeneration thinnings & allow the regeneration of site-native species.
- Fell all trees between & adjacent to existing yew blocks & individuals to create open chalk habitat for yew to colonise. Limited intervention (natural reserve).
- Select trees for thinning, felling & pruning on an individual basis to enhance the recreation facilities in this area.

Approved by (FC): 

Date: 

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Produced by the Planning Team July 2006


Forest road
Rides and tracks
Watercourse
Open water
Compartments
Sub-compartments

1:18,000
Future Species Map
Indicative of the structure of the woodlands at the end of the plan period (2036)

- Forest road
- Rides and tracks
- Watercourse
- Open water
- Management Area
- Native broadleaves and yew
- Native broadleaves regenerating amongst (& replacing) non-native conifer species
- Open grassland habitat with scattered individuals/groups of native broadleaves and yew
- Open chalk grassland and yew
- Open space and native broadleaves around recreation facilities
- Native broadleaves with open chalk grassland and yew
- Permanent open space*

*Temporary open space will exist throughout much of the woodland area as a result of management systems that make use of alternative to clearfell techniques. These will involve the selective felling of groups and single trees to bring about the natural regeneration of native species.