Forestry Commission England

Bramshill Forest Plan

South England Forest District

Forestry Commission England

Forests Included Within This Forest Plan

Bramshill Plantation

Heath Warren

Warren Heath

Eversley Quarry & Busta Triangle

Yateley Heath Wood

Gorrick Plantation

Forestry Commission England

Approval

Date of Commencement of Plan: **1 June 2018**

Approval Period: **2018 to 2028 (10 Years)**

Summary of Activity within Approval Period:

A separate Felling License provides approval for standard silvicultural thinning across the South Forest District estate as a whole.

Forestry Activity/System	Habitat Type (ha)			
	Conifer High Forest	Broadleaf Woodland	Mixed Woodland	Open
Clear-felling	**80**			
Silvicultural Thinning Prior to Clearfelling Beyond 2028	**550**			
Restocking	**144 (including 63 ha of currently open mineral extraction area)**			
Woodland managed under a low impact silvicultural system	**145**	**75**	**50**	
Open habitat				**170**
Wet Woodland Management		**25**		
Coppice	**5**			
Non Forestry Activities	**4**			
TOTAL MAPPED AREA	**1104**			

Forestry Commission England

Contents

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Approval

FOREST ENTERPRISE Application for Forest Plan Approvals

Forest District:	**South England Forest District**
FC Geographic Block No:	**84 & 85**
Forest Plan Name:	Bramshill Forest
FE Plan Reference Number:	**304/87/18-19**
Nearest town or village:	Yateley
OS Grid Reference:	**SU 8158 6058**
Local Authority:	Hampshire County Council - Hart District Council West Berkshire County Council - Wokingham Borough Council

I apply for Forest Plan approval for the property described above and in the enclosed Forest Plan.

I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed:

.....

Bruce Rothnie, Deputy Surveyor, South England FD

Date:

Approved: .....

Forest Services Area Director

Date:

Forest Planning

Forest Plans define the long term vision for a woodland or a collection of woodlands, usually looking 50 to 100 years ahead. It sets objectives and illustrates how management will move towards achieving this vision over the initial 10 to 30 years. Forest Plans largely deal with silvicultural management and not the management of non forestry activities which may arise during the plan period.

This plan represents the first major review of the Bramshill Forest Plan that was originally consulted upon and approved in 2007. The revised Forest Plan has been prepared following a review of the original plan undertaken by FC staff, and in consultation with stakeholders. It has incorporated developments in policy and local initiatives that have occurred in the intervening years.

The Forestry Commission managed land in Bramshill Forest includes an amalgam of rotationally managed conifer plantation, lowland mixed deciduous woodland and significant areas of open habitat. This strategic plan should be read in conjunction with the Bramshill Forest SPA & SSSI Plan (2018) which provides a detailed overview of the conservation management of the open habitat component across these Forest Blocks.

Consultation and Approval Process

At key points throughout the Forest planning process, we seek the views of external stakeholders, including local communities and organisations involved with biodiversity conservation, public recreation and the timber industry. Through this consultation process we can ensure that an appropriate balance of objectives is achieved. Details of the consultation strategy for this forest plan can be found in Appendix A.

Approval of the Forest Plan is granted by the regulatory arm of the Forestry Commission, known as Forest Services.

This regulatory approval is usually valid for 10 years and grants a 10 year felling licence. The Approved plan will be reviewed at year 5 to ensure proposals are still relevant, suitable and in line with current policy and guidance. This will also be an opportunity to evaluate the success of management over the 5 year period and engage any amendments to the forest plan that may be required.

Objectives for Bramshill Forest

- Provide a regular supply of quality timber to support the forestry sector and wider economic development.
- Maintain the conservation value of wooded and open habitats seeking to improve ecological connectivity across the Forest Blocks
- Safeguard the European listed birds for which the site is internationally designated.
- Maintain and increase the species and age diversity of the woodland.
- Provide, maintain and enhance where possible the recreational experience of the woodland.
- Control invasive plant and animal species and reduce their impact across the forest blocks.
- Contribute to water storage and flood alleviation in the wider catchment through wetland habitat restoration and maintenance at a forest-scale.

Location

The Public Forest Estate in Bramshill Forest is positioned on the Hampshire/Berkshire boundary to the North of the M3 corridor between Basingstoke in the West, Reading to the North and Camberley in the East. The blocks cover some 1105 hectares between the M3 in the South and Wokingham further North.

Landscape and Historical Context

The majority of the area was historically part of Eversley Forest which was positioned between Pamber Forest in the West, Windsor Forest to the North and Bramshot Forest to the South. Gorrick Plantation is located within the historic footprint of the previously far more expansive Windsor Forest.

Many of the forests are covered by conservation designations including '*Sites of Special Scientific Interest'* (SSSI) and '*Special Protection Areas'* (SPA), they also sit within Natural England's Thames Basin Heaths National Character Area (NCA) and are strong influences on the direction of management.

Bramshill Forest is comprised of a mixture of rotationally managed conifer plantation, mixed woodland and lowland dry heath, valley mires and scrub as well as ponds with significant areas of land that have recently or are in the process of being restored following minerals extraction. The blocks are somewhat isolated from other areas of high value conservation habitat by roads, farmland and expanding built-up areas all heavily modified from their Eversley Forest origins.

The area of SSSI and SPA are notified for important bird breeding habitat provided by the management of rotationally felled conifer plantations as well as a series of ponds and mires which support a rich assemblage of dragon and damsel fly.

Much of Bramshill Forest has been excavated for gravel extraction, a process which is still ongoing but drawing to a close. After excavation the sites are infilled and capped with clay and a layer of over burden and then returned to rotational forest management. In places this has been a mixed success and has led to the diverse mixture of landforms evident today. In addition a network of waterbodies and interconnecting ditches add to the landscape character, many being a legacy of historic minerals extraction. Since the turn of the century the Forestry Commission has been gradually restoring and maintaining open habitats across the Forest which has opened up a variable topography and improved the landscape aesthetics by providing a variety of wooded and open conditions.

The climate is typical of south-east England with rainfall below 700mm per annum and temperatures ranging from a mean 14.2^{o}C for the warmest month and 5.3^{o}C for the coldest month.

Tenure

The forests are managed by Forest Enterprise (an Agency of Forestry Commission England) and administered as part of the South England Forest District. It covers some 1105 hectares (ha) with 368 ha being freehold and 738 ha managed under leasehold agreement.

Current Forest Structure

The main tree species found in the forests are Corsican Pine, *Pinus Niagra var. Maritima* and Scots Pine, *Pinus Sylvestrus*. Future forest management will aim to diversify the species mix, particularly as many of the stands have been affected by *Dothistroma* (Red Band Needle Blight). The age structure is fairly diverse reflecting a history of active management and the periodic interventions from gravel extraction. Where appropriate the use of continuous cover forestry systems will be used to diversify the age classes further.

Silvicultural Systems

The 2 conservation designations that cover the forests desire a rolling programme of rotational open space, and as such the main system that will be employed will be a clear-fell restock system. Around the edges of the blocks stretches of broadleaf mixed woodland occur, these act both as a screening and important landscape diversity in an otherwise largely monoculture woodland. Where possible an appropriate continuous cover system will look to be used to enhance this into the future and contribute to the sustainability of the blocks.

Open Space

Open space is an important feature of a forested environment, this plan revision aims to provide a rolling programme of open habitat into the future with a minimum of 10% existing at any one time. This will include the following Section 41 NERC Act (2006) Habitats of Principal Importance in England:

Extensive occurrence/major habitat type:

- Lowland heathland
- Ponds
- Open mosaic habitats on previously developed land (an amalgam of one or more of Lowland heathland, Ponds, Lowland dry acid grassland, Lowland meadows, Reedbeds, Lowland mixed deciduous woodland and Wet woodland arising on Post-minerals landscapes)

Significant but localised/occurring as a sub-habitat:

- Lowland dry acid grassland (a component of the lowland heathland)
- Lowland meadows (localised distribution at Bramshill Plantation in response to post-minerals landfill)
- Reedbeds (locally dominant in selected ponds at Bramshill Plantation)
- Lowland mixed deciduous woodland (largely a fringing component on the margins of the Forest complex)
- Wet woodland (includes wet scrub as a sub-habitat)

In many of the blocks this 10% will be much greater due to the presence of large areas of permanent and semi permanent open space, a well maintained and extensive forest road and ride network and the periodic interventions from forest management and gravel extraction/re-instatement. Additional conservation work will also be determined at the operational stage of management and could include the creation of a scalloped and graded structure providing pinch points, box junctions, forest glades etc, for a variety of key flora and fauna. The combination of forestry derived temporary open space, maintained permanent open habitat and the managed priority ecological corridors which connect them will give rise to a dynamic landscape cycling between wooded and open conditions. More detail on the maintenance of open habitats is addressed in the Bramshill Forest SPA & SSSI Management Plan (2017).

Veteran Tree's and Deadwood

Veteran trees are an important feature of a forested environment. The UKFS classifies a veteran tree as 'a tree of considerable age that is of interest biologically, culturally or aesthetically because of its age, size or condition, including the presence of deadwood micro habitats'. Management interventions will aim to leave a proportion of standing and fallen deadwood in areas of high ecological value and create linkages where appropriate. Existing veteran trees will aim to be retained where appropriate and management will focus on selecting individuals to eventually take their place. At Bramshill Forest the scope for veteran tree development and persistence over time will be found primarily in the fringing belts of mixed and broadleaf woodland. However, sporadic feature trees will be retained across the dominant Conifer plantation. Wet woodland clusters spread across the blocks will provide opportunities for more rapid cycling of dead and decaying wood.

Biodiversity and Conservation

The forests form an important part of the much more extensive Thames Basin Heaths Special Protection Area (SPA) which extends over parts of the Hampshire-Berkshire-Surrey boundary covering 8275 hectares (ha). The SPA was formally designated on 9th March 2005 due to the site supporting important breeding populations of nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea* and dartford warbler *Sylvia undata* (at 7.8, 9.9 and 27.8% of the British populations respectively). The SPA designation is underpinned by two nationally important Sites of Special Scientific Interest (SSSIs), Bramshill SSSI and Castle Bottom to Yateley and Hawley Commons SSSI respectively. All forests in the plan are included in the SPA and SSSI designations with the exception of Gorrick Plantation which has been selected as a Local Wildlife Site, known locally as Wildlife Heritage Sites. Bramshill SSSI covers Bramshill Plantation, Heath Warren and Warren Heath with Castle Bottom to Yateley & Hawley Commons SSSI covering Eversley Quarry & Busta Triangle and Yateley Heath Wood.

Biodiversity and Conservation Continued -

Bramshill SSSI - Notified for a series of shallow acid pools and associated mire, which support a rich assemblage of dragon and damselfly and rotationally felled conifer plantation which provides habitat for the internationally important populations of nightjar, woodlark and Dartford warbler.

Castle Bottom to Yateley & Hawley Commons SSSI - This site is notified for its heathland and young conifer plantation which supports an internationally important population of Dartford warbler and populations of two other internationally important species, woodlark and nightjar. The scrub/heathland interface supports a particularly rich invertebrate fauna including a number of nationally scarce species. It also supports an outstanding Dragonfly assemblage.

The following UK Biodiversity Action Plan/NERC Act (2006) Section 41 Habitats of Principal Importance are present in the forests**.**

Major habitat component:

Lowland heathland – occurs as a network of core dry heathland habitat patches, valley mires and along interconnecting internal corridors including road and ride sides, open drainage corridors and powerline wayleaves

Ponds – main cluster within Bramshill Plantation but scattered across the blocks

Open mosaic habitats on previously developed land – could arguably sweep up much of the open habitat falling outside of the rotational forestry stands that has at some point been worked for minerals

Lowland mixed deciduous woodland – occurs predominantly on the woodland margins

Minor habitat component:

- Lowland dry acid grassland – occurs as a sub-component of lowland heathland (see above)
- Lowland meadows – local distribution in Bramshill Plantation under influence of historic landfill
- Reedbeds – local distribution in Bramshill Forest
- Wet woodland – scattered distribution of wet woodland and developing wet scrub

Biodiversity and Conservation – Management

Since the turn of the 20th Century the conservation benefits provided by rotational forestry have been married up with ongoing conservation management interventions that have opened up relict valley mire systems, widened internal heathy corridors along roads, rides and ditch networks, restructured gorse blocks, treated wet scrub around waterbodies and removed invasive Rhododendron from large parts of the forest landscape. Internal conservation funds provided by DEFRA have been complemented by external funding streams including The Heritage Lottery Fund (HLF) via The Hampshire Heathland Project and Landfill Tax supported projects for pond creation and rare plant conservation.

Our sustainable land management over the duration of this plan will seek to maintain the conservation interest of both the SPA and its component SSSIs by providing a balance between rotational forest management and its cycle of clearfell-restock together with the maintenance of permanent open space managed as open habitat. Management areas will be connected via internal corridors comprising the road and ride sides together with drainage infrastructure.

Conifer plantation managed under the clearfell-restock cycle will provide a continual supply of open space suitable for breeding nightjar and woodlark. Harvesting residues will be treated to create nesting habitat and permit replanting. This temporary open space will persist until the trees close canopy at between 5-7 years of age being initially more favourable for Woodlark with a longer span of suitability for Nightjar. The temporary fencing which accompanies these restocked stands until they reach thicket stage will provide ground nesting birds with added protection against disturbance from people and dogs.

Biodiversity and Conservation – Management Continued

More detailed prescriptions for the non-forestry related conservation management are provided in the Bramshill Forest SPA & SSSI Management Plan (FC 2017) but the areas will be maintained via a combination of mechanised and motor manual vegetation management together with targeted volunteer input where feasible. Conservation grazing will be pursued and if successful be implemented in series of phases to maintain permanent open habitats and heathy woodland/wooded heath enveloped within the area. Grazing and browsing by a combination of cattle and ponies will help to supress vegetation regeneration and in particular provide the disturbance required by rare plants associated with mires and ponds. The boundaries of the proposed grazing areas presented within this plan are indicative and their implementation is subject to public consultation, funding availability and the development of a 3rd party grazing agreement. The SPA & SSSI management plan will also explore opportunities to re-engineer and re-naturalise drainage where this contributes to biodiversity conservation and sustainable drainage/flood alleviation in the wider catchment.

Biodiversity and Conservation – The Landscape Dimension

In addition to the conservation designations described above Bramshill Forest sits within a landscape where wider ecological restoration opportunities are being explored with a view to buffering and connecting the relatively isolated internationally and nationally important wildlife sites. This mapped area has been defined as the Thames Basin Heaths Biodiversity Opportunity Area (BOA) and we will work with Natural England and our wider conservation partners to ensure Bramshill Forest contributes to the aspiration of landscape scale ecological restoration and reconnection. This will principally involve our ongoing efforts to improve the ecological connectivity of the component forest blocks which make up Bramshill Forest.

Soils

The soils in the forests are generally acidic and phosphorous deficient. The sandy surface horizons are permeable, passing to a fine loamy and slowly permeable clay layer below. Whilst the soils are generally dry where topography aids free drainage, there are a number of low lying areas that give rise to wet heathland habitat. The soils also vary across the sites particularly where they have been re-instated following gravel extraction and tree growth and performance has been mixed. Impeded drainage has given rise to a variable and interesting vegetation composition across the respective forest blocks.

Water

Bramshill Forest sits within the Loddon catchment and its complex of ponds, drains and mires eventually feed into the nearby Rivers Blackwater, Whitewater and Hart respectively. The future management of Bramshill Forest will seek to contribute to flood alleviation in the wider catchment slowing the flow from the component blocks and re-wetting valley mire systems to benefit biodiversity. The accompanying Bramshill Forest SPA & SSSI Plan (2007) will identify opportunities to re-naturalise drainage where feasible. These works will become increasingly important in light of climate change and the increasing incidence of extreme weather events.

Bramshill Forest has been listed by The Freshwater Habitats Trust as being a ‘Flagship Pond Site’, alongside such better known pond landscapes as The New Forest. The nationally important pond network dispersed across the forest blocks is renowned for its dragonfly and damselfly assemblage. They are also important for the plants which grow in the shallow margins that periodically become exposed as water levels drop during the summer months. A range of vegetation heights and levels of disturbance will be maintained around pond margins. The shorter, disturbed patches are where the rarer plants tend to be found, while the taller emergent vegetation and scattered bushes provide structures for the dragonflies and damselflies to use as they crawl out of the water and dry their wings. This aquatic habitat will be maintained through a combination of periodic cutting and grazing.

People

The forest blocks occur in close proximity to existing and expanding built-up areas being located between Basingstoke, Reading and the Blackwater Valley conurbation with connectivity to London and beyond via the M3 corridor. Despite the relatively low levels of visitor infrastructure the site experiences medium to high levels of visitation and is a popular resource for walkers, dog walking, horse riding, mountain biking, running and wildlife survey/appreciation. Unfortunately the forest blocks also suffer from problems associated with the urban fringe, this includes fly tipping, unauthorised vehicle access, burnt out cars, forest fires and commercial dog walking. In the areas managed under a leasehold agreement public access is restricted to the public rights of way. The entire forest however provides a valued resource for a number of permitted activities including motor sport (car rallies and enduro), horse-riding, mountain biking, charity events and wildlife survey, monitoring & enjoyment.

People Continued -

We are working in partnership with the Natural England hosted Thames Basin Heaths Wardening Initiative to better inform the general public about the sites international & national importance for wildlife and sustainable forestry with a view to encouraging responsible use of Bramshill Forest. In addition efforts are being made to improve the interpretation provision across the footprint of the forest and promote its special interest and value to society. Lastly, subject to resources and collaborative working with conservation partners we would be keen to explore greater engagement with volunteer groups to support site management and monitoring. This issue will be explored in greater detail in the Bramshill Forest SPA & SSSI management plan (2017). Lastly, subject to resources and collaborative working with conservation partners we would be keen to explore greater engagement with volunteer groups to support site management and monitoring. This issue will be explored in greater detail in the Bramshill Forest SPA & SSSI management plan (2017).

Historic Environment

Historic England is a statutory advisor to the government that works with landowners to conserve and enhance the historic environment. Forestry commission staff liaise with local Historic England teams and county archaeologists during the operational stage of planning to ensure that scheduled monuments are protected during forestry operations and managed in accordance with their associated management plans. In this plan there are 2 scheduled monuments and several unscheduled features as well as an grade 2* historic parks and gardens designation.

Landscape Design

The topography of the forest blocks are relatively flat and low-lying so that the only forest edge is visible from the surrounding public roads. Broadleaf trees have been retained along the forest boundaries often to help soften the forest edge, although these strips can compromise the landscape when areas behind them, are felled creating a narrow fringe In front of the open space.

The internal landscape of these forests is typified by large areas of young even-aged forest resulting from the extensive replanting of quarry sites. However, where areas of mature forest and open heathland ae found in mixture of these young crops, the landscape becomes much more attractive. Forest management will now interpret the wider landscape to assist with the design of clear-fell areas that will create structural diversity in the future. Internal landscape, in particular, will be designed and managed to create visual interest when viewed from public rights of way and permissive trails.

Tree health, Invasive Species, Wildlife Disease & Biosecurity

The main diseases of concern for tree health are currently deemed to be Red band needle blight *Dothistroma* affecting Corsican Pine Pinus Nigra, *Phytophthora ramorum* affecting Larch Larix sp. and Chalara *Hymenoscyphus fraxinea* which causes Ash dieback. Corsican Pine is a significant tree species and there are small stands of Larch. However, the move toward a more diverse range of species should make the forests more resilient in the event that a significant pathogen arises in future decades. As Ash *Fraxinus excelsior* is present as a minor tree species due to underlying soil conditions it is not considered a critical component of the structure in wooded areas. The P. ramorum host plant Rhododendron *Rhododendron ponticum* is present across the forest and the adjoining landscape but has been placed under a long-term management programme on the public forest estate.

Himalayan balsam *Impatiens glandulifera* is spreading in the wider landscape and continued vigilance will be required to ensure that the species does not become established. Japanese knotweed *Fallopia japonica* presents a major risk to forest infrastructure and biodiversity and its presence will be controlled as a priority should it become established. Australian swamp stonecrop *Crassula helmsii* has become established in some of the water bodies at Bramshill Plantation and efforts are being undertaken to prevent its wider spread with management treatments under consideration. The widespread exotic frog population at Bramshill Plantation has been found to host the Chytrid disease harmful to native amphibians. Efforts will be made to prevent the spread of this disease via ongoing engagement with contractors and visitors.

Guidance and action plans are constantly evolving to adapt to tree health, invasive plant and wildlife disease threats. The sudden emergence of a tree disease or pest, invasive plant or wildlife disease can result in the need to fell a coupe earlier than planned, alter restocking plans or adapt habitat management programmes. We will continue to monitor for tree diseases and pests, invasive plants and wildlife disease as required and take appropriate action. Any changes to the forest plan will be notified or agreed with Forest Services and Natural England in accordance with the relevant guidance. Biosecurity is of critical importance at Bramshill Forest both in respect of forestry and conservation management operations and with regard to public access.

Mammal browsing is also a threat to the sustainability of forests and wildlife in southern England both from a timber production and biodiversity conservation perspective. Bramshill Forest supports Fallow deer *Dama dama,* Roe deer *Capreolus capreolus* and Muntjac deer *Muntiacus reevesi*. Red deer were present historically but hunted out during the 20th Century. Deer will be managed in accordance with the South England Forest District Deer Management Strategy with a view to supressing their damaging effects on timber regeneration and biodiversity conservation. However it is important to note that deer are an important component of the ecosystem and support ecological processes such as vegetation control, seed dispersal, disturbance and the provision of carrion benefiting scavengers. Our management of deer will form part of a landscape-scale approach working in collaboration with partners such as The Deer Initiative.

Climate Change

Climate change represents one of the greatest long-term challenges facing the world today. Conventional forest management systems have developed in a climate that has undergone fluctuations but remained relatively stable since the end of the last ice age (around 10,000 years ago). However, the average global temperature is now rising and there is evidence that rainfall patterns are changing. There is also likely to be an increase in the incidence of extreme weather and the frequency and severity of summer drought.

This is likely to represent the greatest threat to forests in the UK over the coming decades. UK forest management needs to respond to these threats in two principal ways: through mitigation, including ensuring management is sustainable, and adaptation, including species diversification.

Wildfire Resilience

Reducing the incidence and impact of wildfires in forests and woodlands through good management planning is important for sustainable forest management and to protect the provision of forest ecosystem goods and services.

This plan will aim to build on the wildfire resilience already present in the forest by acting on the following points;

- Managing the vegetation to maintain a network of fire breaks, reducing fuel across an entire site especially along roads and rides.
- The use of continuous cover forestry to create a diverse forest structure.
- Where appropriate fragment high risk species and habitats into smaller areas to reduce the risk of fire spread.
- Restore, maintain, enhance and increase broadleaved native woodland particularly around high risk areas.
- Restore and enhance forest wetland habitats to provide a natural barrier to the spread of fire.
- When restocking sites use appropriate species relative to the forests wildfire risk.

These management principles will be implemented during the operational stage of planning and are intended as a guide only.

A site specific wildfire risk assessment for Bramshill Forest can be found in the appendices and should be should used in conjunction with a wildfire management plan.

Forest Plan Maps

When consulting on the maps, please refer to the glossary for further detail about the prescriptions.

Aerial

Shows the location of the woodlands in the wider landscape using aerial photography

Indicative age diversity

Shows the planting year and age of the trees in the woodland.

Species Diversity

Gives an indicative illustration of the number of different species within the woodlands (includes open space). However it should be noted that the data only accounts for trees in the canopy and should only be taken as a general overview of the number of different species present within a sub-compartment.

Current structure

An overview of the current habitat types existing in the woodlands.

Medium Term Vision

Illustrates the proposed medium term structure of the woodlands and other habitats consistent with the Forest Plan objectives. While there is no fixed time scale for the habitat transformations depicted , an indicative term of around 20 years is assumed.

Long Term Vision

Illustrates the proposed long term structure of the woodlands and other habitats consistent with the Forest Plan objectives. While there is no fixed time scale for the habitat transformations depicted, an indicative term of around 100 years is assumed.

Habitat Restoration and Felling

Shows the management proposals in the shorter term, 10 to 30 years. These proposals are the initial stepping stones towards achieving the long term vision.

Fire Risk Map

Shows the current fire ratings for the woodlands as well as the existing fire break network, water sources and locations of past fires in the area.