

PETERSFIELD HEATH MANAGEMENT PLAN 2017-2021



Prepared by

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on behalf of the

South Downs National Park Authority

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1. Introduction

This report sets out a five-year conservation management plan for Petersfield Heath. This plan follows the comprehensive Management Strategy prepared by Dolphin Ecological Surveys in 2015 which should be read alongside this management plan to provide full contextual information.

The strategic document identifies the key conservation objectives and management priorities to achieve the stated overall objective which is:

To maintain Petersfield Heath as an accessible, safe, open space for the use of local people and other visitors whilst maximising its biodiversity and celebrating its outstanding archaeological importance.

The strategy highlights the competing interests and the need to integrate management activities as far as possible to meet the needs of ecological and archaeological conservation along with public access and recreational pressures.

This conservation management plan is intended to be succinct and focussed on actions required to deliver two of the identified strategic aims,

To integrate management for archaeological and ecological objectives wherever possible,

To enhance the structural diversity of habitats and maintain a mixture of open water, grassland, heathland, scrub and woodland on the site

The remaining two aims regarding management of the pond and issues of public access and information are not considered in this report.

2. Conservation Management Key Actions

The management of Petersfield Heath must address a diverse set of archaeological, ecological and recreational needs. To do so, actions are intended to address multiple outcomes and should be simple to interpret and manageable to deliver. Therefore, the action plan addresses three main areas of concern. The plan does not set out in detail all the routine annual management processes such as amenity grassland cutting, path management etc. Rather this plan concentrates on the requirements for managing the barrows and their immediate surroundings and a few other sites requiring particular attention.

Barrows

Petersfield Heath contains an exceptional concentration of Bronze Age barrows and on-going archaeological research is highlighting the overall importance of this site. Because of their interest and legal protection it is recommended that the restoration of these features should be the primes focus for the five year management plan. The barrows are currently in different successional stages of vegetative cover and have been subject to various levels of disturbance and management including archaeological excavation. Some barrows are quite clear of established vegetation whilst others have dense scrub and/or mature trees with touching canopy. For some, urgent management is required. This will include tree

removal and maintaining open vegetation on the barrows as well as management of the immediate surrounding area through scrub clearance and tree removal. This will protect the barrows through reducing the risk of windblow and from burrowing animals. It will also improve the views between this complex of historic features and so engender a greater awareness of the overall integrity of the Heath. It is these actions over the next five years which will also contribute to addressing some of the wider strategic aims for scrub and woodland management across the site. Once vegetation has been cleared and trees felled or thinned then an annual cut and remove of the year's growth on the barrows will be necessary to restrict successional processes. Barrow vegetation will vary due to different micro-habitat conditions and these differences should be encouraged within an overall approach. Annual management must respond to how the vegetation develops after initial scrub or tree clearance. Some barrows have been cleared in recent years but with little sign of any follow-up cutting light scrub is now returning which could encourage burrowing mammals and obscures the feature from being appreciated by the many visitors to the Heath. Annual mowing of the barrows will also help facilitate ongoing archaeological excavation and research.

Woodland

The focus of activity will be on the barrows and the immediately surrounding woodland. Selective tree felling and limb removal is required. Several barrows have mature planted Scots Pine which have become significant features of the landscape. Most of these will be retained to preserve that visual characteristic and to avoid what would otherwise be severe disturbance to the ground through felling. Whilst each barrow needs specific actions, in general all young trees/saplings under 30cm diameter at chest height which are within the protected area of the barrows should be removed. For some barrows this clearance should extend to an area within ten meters of the edge of a barrow to improve visibility and reduce tree/scrub encroachment. Several larger trees need some limb removal to open up the views, increase light levels and reduce risk from falling timber. Trees on barrows, or within ten meters of them, which are at risk of collapse will be felled and left close by. Standing deadwood not at risk of collapse will be retained as will fallen deadwood where it does not obstruct paths. If the work programme to restore the individual barrows and views between them progresses ahead of expectations then further thinning and glade creation into the woodland within the locality of the barrows could be undertaken. Please remember that a felling licence must be received from the Forestry Commission before trees are felled.

Heath / Grassland

Once trees or scrub has been cleared from barrows or where there has been archaeological excavation then the desired vegetation cover can be encouraged by annual cutting by hand-strimming or using a small flail mower.



Figure 1 Typical semi-improved grassland

The open grasslands (Figure 1) have the potential to develop into more species-rich, acid grasslands with patches of scrub providing a diverse habitat mosaic. Over the period of this plan the aim should be to cut and remove the vegetation from 20% of the grassland each year to open up the sward, increase structural diversity and encourage less competitive plants to thrive. In places the botanical diversity is good with plants such as tormentil, sheep's sorrel and devil's-bit scabious. Being an inherently infertile soil it is expected that here is a good seedbank which will soon appear under this rotational management. Given the scale of the

site this operation should be undertaken by an agricultural contractor.

In addition, there are some specific actions for sites with particular requirements. Four of these are included in the action plan at Appendix A-2. For example, an area south of barrow 8 (map ref. A) has some more species-diverse patches (Figure 2). The gorse needs thinning here and the area should be cut every 2-3 years rather than annually.

Figure 2 Richer grass sward with gorse encroachment.



Another notable site is the area of expanding heather on the south facing bank adjacent to Heath Road (Figure 3) (map ref. B). The vegetation cover and bank aspect is consistent with reptile habitat and should be kept clear of the encroaching bracken which will need to be manually removed.



Figure 3 Heather bank near Sussex Rd.

The strategic plan draws attention to the options for heather regeneration including the creation of plots of heather by removing topsoil and spreading cuttings. This has been successful in terms of generating new heather growth, however, as the strategic document points out it is not a suitable technique in terms of protecting the archaeology on site. Furthermore, the heather patches created form rather 'un-natural' looking neat plots (Figure 4). A more appropriate management action is to encourage natural propagation

of the existing heather which is to be found in several sites around barrows and also amongst some of the scrub and grassland areas.



Figure 4 Heather plot near barrow 13

The existing more mature heather should be avoided when annual cutting is undertaken (except where archaeological excavations are planned) and its growth can be encouraged through bracken, scrub and tree removal or control. In the subsequent five-year plan, following a survey of the heather regeneration, future management options to deliver a diversity of heather growth stages can be reviewed and actions delivered.

Gorse should be regarded as a key element of the conservation value of the Heath. Dartford warblers in particular favour the shrub and have been recorded as winter visitors and they nest on other heath lands nearby. Some mature bushes have been coppiced but regrowth has been poor. This may be due to the age of the bushes and the fact that all the stems were cut causing great stress and then death. It is proposed that a trial of selectively coppicing only some of the stems of a particular bush are cut at any one time to reduce the impact of the cutting to see if this is an effective way of retaining and rejuvenating the gorse in the future. Through links with the SDNPA it may be possible to set-up a trial on another heathland site before coppicing more of the gorse on Petersfield Heath.

3. Conservation Management Plan

Management Action Plan and Timing

The Management Strategy covers a ten-year period and includes aims for the archaeological sites, woodland, scrub and grassland. This management plan (appendix A) covers the first five years and all barrows are included with specific requirements for each (appendix B). Barrows have been allocated across the five-year period for action in groups in order to contain disturbance from conservation work and maximise the impact of improved visibility between barrows. The more significant structural work is biased towards early years but these annual allocations can be amended especially considering archaeological digs which may be planned.

The approach adopted here is to concentrate on the accepted priority issue which is the archaeological sites. Within the anticipated resources available to site management, on top of the existing general grassland and scrub management, this work on the barrows and the immediate surrounding areas is expected to provide ample employment for staff, volunteers and contractors. For each of the five years major work on trees and scrub is indicated with only routine management being required thereafter.

Where current condition requires more urgent attention, for example where scrub encroachment is a particular issue, then this is included in the early years of the plan. There is scope in this first five-year period for management of additional areas dependent on available resources. Actions for a few particular grassland areas and heather-rich patches have been suggested.

Some of the strategic management plans, for example woodland coppicing, glade and ride creation and management can be addressed during the period 2022-2026 and should be detailed in a specific woodland management plan for the site. However, as already mentioned, thinning and glade creation during this plan period can extend further into the woodland in the locality of the barrows if the priority works are completed ahead of schedule.

The choice of exactly which areas are tackled each year can be altered to meet developing constraints or opportunities. This should include risk assessing disturbance to other wildlife for example winter bat roosts and badger setts. The activities and available resources must be reviewed and amended annually.

Management Protocols

The Management Strategy sets out relevant protocols so this plan just focuses on action planning. Specific techniques or requirements are only included where necessary for clarity. Additional detail for some activities and based on conservation managers' judgement at the time (for example identifying individual trees for removal) will need to be included in specific work plans or contractors agreements.

4. Further considerations

Communication

Where significant work is taking place then information notices on site should be erected to inform members of the public and address any safety issues. In addition, a communication strategy using diverse media methods should be developed to reach residents and visitors. The Management Strategy sets out this requirement and further detail on a communication strategy is not included here.

Because the Barrows are Scheduled then Heritage England and the county archaeologist should be informed of the proposed management and their views sought well in advance of the planned start date of tree and scrub management.

Tree Preservation Orders

East Hampshire District Council records suggest that none of the trees on Petersfield Heath are subject to tree protection orders or other local conservation area conditions (Figure 5). Site managers should confirm this if necessary in case notification in advance of management works needs to be made.

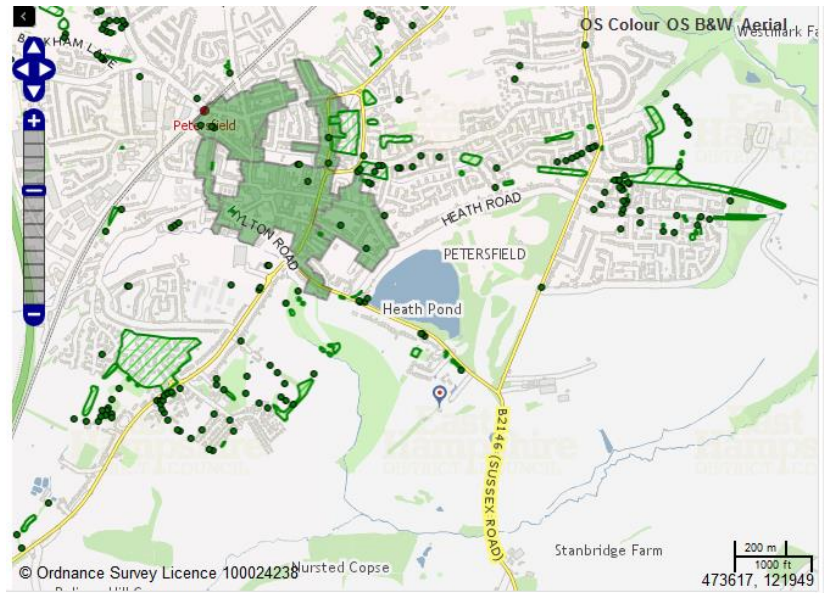


Figure 5 Local Conservation and Tree Protection Order Areas Petersfield (<http://maps.easthants.gov.uk/easthampshire.aspx>)

Surveys and Monitoring

Surveys and monitoring are crucial to inform management actions and evaluate progress and outcomes. The strategic document sets a survey and monitoring schedule. Monitoring is included here as an annual process with recommended priorities but this needs further specification including types and areas to be surveyed based on what is feasible from existing and any new resources, especially voluntary work.

Given that the Heath is popular and highly valued it is recommended that once or twice a year there should be a site meeting for all those with responsibility for management in order to review progress and agree the next work needed to keep the management timetable and this five-year plan on track.

5. Appendices

Appendix A-1 shows a recommended timescale for the key barrow management/clearance work required with each year work taking place on a set of closely-located barrows.

Appendix A-2 covers the key management actions for general areas of the site and for a few specific locations which are not barrows.

Appendix A-3 is an example of a potential annual plan format which site managers may want to consider creating. It can be used to define actions month by month and would be a key planning process for annual review with stakeholders.

Appendix B provides a brief individual description of the condition and management recommendations for each barrow.

Appendix C maps the barrows and four other sites and shows the suggested schedule for major clearance work. (This map is also provided as an A3 format pdf).

Appendix A-1 Timetable for barrow management

Barrow	2017	2018	2019	2020	2021
1	Tree felling and limb removal Scrub clearance				
2					
3					
4					
5		Tree removal from 5 & 6. Scrub clear 5			
6	Scrub clearance				
7			Tree felling and limb removal from 7 & 8. Scrub clearance all		
8					
9					
10					
11	Scrub clearance	Tree removal/cut Scrub clearance			
12					
13				Tree felling and limb removal 13 & 15, Scrub clearance all	
14					
15					
16					Tree felling and limb removal Scrub clearance
17					
18				Scrub clearance	
19					
20					Tree felling and limb removal Scrub clearance
Tumulus SE corner					
Management action key	Tree felling and limb removal from barrow surface and/or immediate 10m vicinity. Scrub clearance on barrow and vicinity. Specifics as shown.		Annual grass/vegetation cut and remove. Scrub/sapling clearance as required		

Appendix A-2 Timetable for other management actions



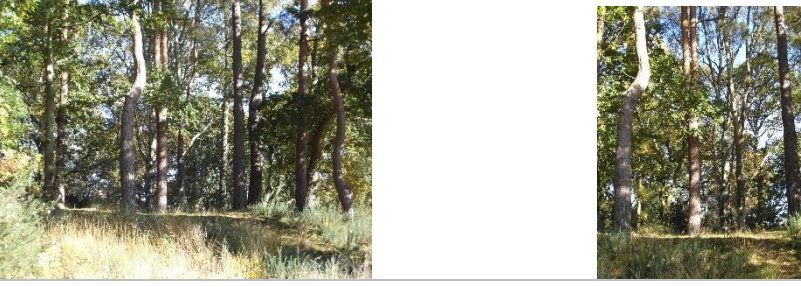

Year	Barrow / Site	Work Proposed	Comments
All years 2017 -2021	All areas	Frequent mowing of amenity grassland will be required to facilitate recreation and general access but cuttings should be removed	Although not a priority for conservation management the amenity areas can still have increasingly diverse swards through a cut and remove process
		Cut approximately 20% of the semi-improved grassland each year. Collect and remove cuttings	Avoid cutting areas of heather growth
		Remove woody invasive species especially Rhododendron and Cherry Laurel along Sussex Rd. margin.	This is not a major risk for the site but annual attention wherever they appear will prevent the spread of invasives.
		Remove bracken where it is invading grassland or heather patches	Manual removal where possible otherwise spot treatment
		Remove saplings (especially birch and rowan) and bramble and gorse where they are invading grassland or heather patches	This needs to be done across the site but targeted where growth is having greatest impact on barrows or more species-rich grassland
		Clear paths from overhanging woody vegetation which will also help to produce narrow firebreaks.	
		Tree and scrub clearance – during works all safe standing dead trees to be retained. Most gorse, alder buckthorn, holly and any berry producing shrubs will be kept although they may be coppiced. Mature standards will be sensitively thinned to favour adjacent trees of better shape or conservation value.	
		Conduct priority habitat and species surveys dependent on feasibility especially voluntary resources	A separate survey and monitoring plan should be developed
		Prepare communication plan for significant works and especially at autumn in time for tree removal on and around barrows	The plan should include effective communication with and between all key stakeholders
		Annual review and assessment of actions for following	






Year	Barrow / Site	Work Proposed	Comments
		year considering other activities such as archaeological excavations and risk to wildlife such as badgers or bats.	
2017	Site A (south of barrow 8)	Thin the gorse cover. Cut and remove across this site this year but not again until 2019 or 2020	This area has some improving species-rich sward and will benefit from less frequent cutting.
	Adjacent to Barrow 12	Cut back nearby encroaching Gorse	
	Site B Heather bank	Remove encroaching bracken, clear small patches to create open ground	One of the best sites for heather and possible reptile habitat.
2018	Site C (north of barrow 11)	Cut and remove to reduce competition on patches of heather	This site is one of the more species rich and warrants specific attention to encourage acid grassland plant, invertebrate and vertebrate species
2019	Site D ('ride' running south from main path)	Cut back encroaching woodland margin and create scalloped edge	Several woodland edges need management. Most of this can be undertaken in subsequent 5 years but this area would benefit from earlier attention.
2020	Site A (south of barrow 8)	Cut and remove	This area has some improving species-rich sward and will benefit from less frequent cutting.
2021	Whole site	Create Woodland Management Plan for subsequent 5 years	









Appendix A-3 Example of monthly plan for 2017







2017	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Barrows 1,2,3,4	Tree felling and limb removal Clear/thin scrub			Cut and remove grass and vegetative cover							Felling and limb removal Clear/thin scrub		
Barrows 6,7	Scrub clearance			Cut and remove grass and vegetative cover									
Barrows 5,8,9,10				Cut and remove grass and vegetative cover							Scrub clearance		
Barrows 11,12	Scrub clearance on 11, clear gorse near 12			Cut and remove grass and vegetative cover									
Barrows 13,14,15,18				Cut and remove grass and vegetative cover							Scrub clearance		
Barrows 16,17,19,20				Cut and remove grass and vegetative cover							Scrub clearance		
Other management													
Scrub	Clearance esp. around Barrow 8										Clearance		
Semi-improved Grassland	Sapling removal			Cut and remove 20%, sapling removal							Sapling removal		
Amenity Grassland	Sapling removal			Cut and remove							Sapling removal		
Invasive species	Removal woody species esp. Sussex Rd.					Bracken removal esp. on bank by Heath Rd.					Removal woody species esp. Sussex Rd.		
Survey/monitoring			Bat summer roosts and foraging routes									Hibernation sites	
				Reptile					Reptile				
				Butterfly transects									
				Birds - breeding									
Action/communication	Communicate Jan/Feb work plan								Communicate winter work plan				

Appendix B Barrows - condition and requirements

Barrow	Condition	Required management
1	<p>Dense bracken and scrub cover, mature birch and pine. Good standing deadwood.</p> 	<p>Remove trees from barrow top other than the mature pines. Thin surrounding trees and shrubs including holly. Selectively remove trees and some tree limbs to create view through to barrow 3 and 4. Annual cut and remove.</p>
2	<p>Dense bracken and bramble cover, several young birch and rowan trees/saplings. Existing good views to barrow 5 and 11.</p> 	<p>Clear bracken and bramble. Remove young birch and rowan trees. Annual cut and remove.</p>
3	<p>Limited ground vegetation in central area due to shading from several mature trees. Scrub including gorse encroaching on edges.</p> 	<p>Remove all saplings under 30cm diameter. Retain mature trees but remove the few lower limbs to increase visibility of barrow structure and surroundings and increase light. Annual cut and remove.</p>
4	<p>Significant patches of heather but bramble and bracken starting to dominate. Set amongst area of woodland with significant shade. Several large trees present as well as naturally regenerating saplings.</p> 	<p>Clear shrubby growth to reduce pressure and shading on heather. Remove all saplings on barrow and within 10 meters but leave mature trees so creating a glade in the surrounding woodland. Annual cut and remove but taking care to protect heather.</p>
5	<p>Open aspect with good light penetration. Several mature trees, significant pines. Saplings present and some shrub growth with</p>	<p>Retain mature trees, clear saplings and developing</p>

	<p>developing patches of bramble etc.</p> 	<p>shrubby growth. Annual cut and remove.</p>
6	<p>Several mature trees but many under 30cm diameter at head height. Some tree regeneration. Considerable shrub growth mainly bramble.</p> 	<p>Remove all trees and saplings under 30cm at head height from barrow and surrounding 10 meters to increase visibility and reduce encroachment. Clear shrub growth. Annual cut and remove.</p>
7	<p>On cricket pitch edge with open aspect to one side but dense bramble. Sapling growth and some mature pines. Grass and dirt pile present.</p> 	<p>Remove saplings and bramble/shrubby growth from barrow and surrounding 10 meters to increase visibility and reduce encroachment. Annual cut and remove. Avoid dumping grass/soil.</p>
8	<p>Large barrow with mature trees, some saplings and dense bracken cover. Recent disturbance suggestive of an archaeological excavation.</p> 	<p>Clear bracken on barrow and remove trees under 30cm at chest height. Remove saplings and shrubs within 10 meters to improve visibility of site especially from south.</p>
9	<p>Relatively low lying barrow. Mainly clear of shrubby growth suggestive of recent management or archaeological activity. May also be affected by levels of shade.</p> 	<p>In good condition, Annual cut and remove to maintain vegetative cover and suppress scrub.</p>

10	Recent vegetation clearance evident. Heavy shading may impact on grass cover growth.		Reduce shading by tree limb thinning. Remove saplings and shrubby growth from surrounding 10 meters. Annual cut and remove.
11	Significant barrow in terms of site position. Mature trees and saplings. Bramble and bracken cover encroaching.	 	Remove trees less than 30cm diameter at chest height. Remove scrub growth from surrounding 10 meters. On south side selectively thin young or decaying trees and remove limbs on mature trees to open up view towards barrows 12 and 13.
12	Very low mound, little scrub growth on actual barrow. Adjacent to footpaths with scrub including gorse very close to mound.		Nearby gorse should be cleared back to discourage people from walking over the barrow. Annual cut and remove
13	Some scrub encroachment from wooded side. Several trees of varying age.	 	Remove trees under 30cm diameter at chest height and birch trees up to 10 meters from edge of barrow to expose barrow structure. Selectively remove trees or tree limbs west of barrow to open up a view to the barrow from the lakeside path. Annual cut and remove.
14	Mainly clear but some bracken and bramble scrub developing. Good standing decaying wood with abundant and diverse fungi.	 	Clear bracken and bramble scrub. Annual cut and remove.

15	<p>Some mature trees, mainly visually impactful pines. Some bracken and bramble scrub and some erosion.</p> 	<p>Retain mature pines. Remove younger trees / saplings from bank and remove bramble and bracken scrub. Annual cut and remove.</p>
16,17	<p>Location not confirmed but area includes trees and scrub. Mix aged gorse and patches of heather.</p> 	<p>Remove trees under 30cm diameter at chest height on barrow and within 10 meters. Remove scrub growth. Thin gorse to encourage heather, but retain some gorse of mixed age. Annual cut and remove avoiding heather.</p>
18	<p>Relatively clear of scrub and trees. Suggestive of being cleared 2-4 years ago. Developing acid grass sward. Some gorse and bramble developing.</p> 	<p>Annual cut and remove.</p>
19	<p>Current excavation. Excellent vistas to barrows 15, 18 and 20</p> 	<p>Once work is completed then annual cut and remove will encourage grass sward.</p>
20	<p>Some mature and young trees on barrow and surrounding. Dense bracken.</p> 	<p>Remove trees less than 30cm diameter at chest height on barrow and within 10 meters. Selectively remove trees or limbs to open up view north to barrow 16. Remove scrub. Annual cut and remove.</p>
Unlisted barrow/tumulus?	<p>At the south east corner of the site is a tumulus. If cleared and some nearby trees removed this offers the potential for significant views.</p> 	<p>Remove trees less than 30cm diameter at chest height on tumulus and within 10 meters. Selectively remove trees or limbs to open up view north. Remove scrub. Then annual cut and remove.</p>

Appendix C Barrows and key sites – annual schedule

