

PETERSFIELD HEATH MANAGEMENT PLAN

2020-2025



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1. INTRODUCTION – Executive Summary

1.1 AIMS OF THE PLAN

Background

This site is one of 13 areas of open space around Petersfield, highlighted as significant in the Petersfield Neighbourhood Development Plan 2013-2028. Together with the network of public rights of way, rivers and tributaries running through the town, these areas are an important link between Petersfield and the surrounding countryside of the South Downs National Park. The sites are listed below and illustrated on a map in the Petersfield Neighbourhood Plan 2013-28.

Petersfield Heath
Greenspace east of Causeway Farm
Tilmore Brook green finger
Green space north of Buckmore farm
Merritts Meadow
Land east of Tilmore Road
Bell Hill Recreation Ground
Land either side of Borough Hill
Borough Hill Recreation Ground & land adjoining the railway line
Woods Meadow (Tilmore Recreation Ground)
Recreation Ground south of Paddock Way
Rotherlands Nature Reserve
Land south of Borough Road

Funding

Recent Section 106 funding for the management of these areas provides an opportunity to strengthen and enhance Petersfield's connection with the surrounding landscape and "to protect and enhance the District's high quality natural environment and its green infrastructure" for the benefit of both people and wildlife.

Working Together

This management plan will be one of 13, one written for each area listed above. It is designed to help officers, environmentalists and other professionals, as well as volunteers and other interested parties, to achieve the aims and objectives of the individual site whilst ensuring a coordinated approach to the management of Petersfield's open spaces and green infrastructure as a whole. Policy decisions or work relating to any of these sites should not be carried out in isolation and should always take into account, the relationship between areas, as well as with the town itself and the surrounding countryside.

Appointment of a Petersfield Officer

The ownership of these areas is varied and therefore, to ensure the successful coordination of this Petersfield project, serious consideration should be given to the appointment of a single Countryside Officer with responsibility for the management of all sites across the town. This will ensure best use of funding and resources available and provide a central point for the sharing of ideas, training, equipment, information and support for volunteers.

Conclusion

In conclusion, this coordinated management approach will not only maximize the resources available but also, act as a multiplier on the benefits achieved. The management of all these sites provides Petersfield with a unique opportunity to strengthen and enhance links with its surrounding countryside in a way that has never been attempted before and in a way, that will benefit both people and wildlife for generations to come.

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1.2 THE PETERSFIELD HEATH MANAGEMENT PLAN 2020 – 2025

Brief

This plan has been commissioned by Petersfield Town Council to set out the proposed management of the Heath over the next 5 years. The three main management aims for the site focus equally on conservation, archaeology and amenity, except where there are legal constraints.

Format

There have been four previous management plans written for Petersfield Heath - written in 1993; 1998 (including the 2002 woodland management plan); 2005; and 2017 - and one management strategy plan in 2015. The aims and objectives have changed little since the first plan in 1993. Most documents relating to this site are available from Hampshire Biodiversity Information Centre (HBIC) however, it is strongly recommended that the Town Council ensure a full set of records is kept in house and that they are updated annually as new information becomes available.

This management plan is designed to bring all of the essential site information collated so far into one new, workable document. It should not however, be used in isolation and must be interpreted together with all documents referenced to ensure that the site is managed with appropriate expertise and knowledge.

General site information contained in previous plans, has sometimes been reproduced rather than rewritten and the archaeological information in the 2017/21 plan, prepared by CJH Agri-Environment Consultants Ltd., has been incorporated where appropriate.

It should be noted however, that a new and more complete report on the archaeology of Petersfield Heath is currently being prepared following the completion of 'The People of the Heath' project. Some recommendations in this plan may therefore need amending accordingly once the report is published. Any update should seek the approval of the Steering Group.

The 1993 Management Assessment Report by Hampshire County Council and the Management & Heathland Restoration Plan written and compiled by the NE Hants Heathland Project provided a very thorough analysis of the site. These two documents have provided key information which has been used to inform all environmental, geographical and historical facts contained in subsequent management plans, including this one.

Important Note

All previous management plans, including the 2015 strategic plan for the Heath, have made three key recommendations:

- i. The establishment of a steering group
- ii. The appointment of a site manager/ countryside officer
- iii. The removal of all arisings from site following habitat management work

It is advised that these recommendations be adopted as a matter of urgency to ensure proper implementation of this plan and a professional and coordinated approach to the management of both this site and others identified in the Neighbourhood plan.

Policy Statements

Petersfield Town Council

Petersfield Heath is owned by a charitable trust (Petersfield Heath Trust) with the Town Council as trustees. The Trust was set up to provide open access to The Heath for the recreational benefit of the local population.

The Friends of Petersfield Heath

An independent group founded in 1999, its stated aims are:

To promote an interest in this exceptional area so rich in archaeology, history and natural history

To preserve the Heath as an area of natural heathland, grassland, woodland and water for the enjoyment of all who use it

To work closely with the Petersfield Town Council in helping to manage the Heath

To undertake voluntary work where appropriate.

Over the past twenty years the volunteer members of Friends of Petersfield Heath have regularly carried out many practical activities including scrub clearance, dead hedging, footpath maintenance, surveying and monitoring. The Friends intend to continue to work closely with Petersfield Town Council and play an active role in the management of the Heath.

The Heath Pond Association

The public has fished the pond for well over 100 years. In 2013 The Heath Pond Association took over from Petersfield & District Angling Club when it was decided that a less intensive fishing regime would be more appropriate to the site. The angling is policed by bailiffs of the Association at least twice daily. Full details of the 2013 management agreement between the Heath Pond Association and Petersfield Town Council are contained in 'The Management of Heath Pond' (**APPENDIX 1**).

Plump Duck Café and Boat Hire

This café replaced an old refreshment kiosk on site some years ago and is likely to have led to a significant increase in visitor numbers. In 2018, the owner Ian Baker, also took over the boat hire from Heath Lake Pleasure boats. In 2019, PTC granted permission for a flotilla of pedalos to be added to the existing rowing boats. (Contact PTC for details of agreements.)

Petersfield Cricket Club

Cricket has been played on the Heath since Victorian times. The cricket club lease the ground and pavilion and manage the square and outfield. For full details contact PTC.

Thanks

This integrated management plan brings together the ideas, aims and objectives of a number of interested parties for Petersfield Heath. Thanks go to the following groups and individuals for their contribution to this plan:

Petersfield Town Council, officers and members

Friends of Petersfield Heath, especially Robin Hart & Richard Warton

The Plump Duck Café & Boat Hire, especially Ian Baker

(Petersfield Cricket Club-No comment)

(Heath Pond Association-No Comment)

South Downs National Park Authority

Petersfield Museum

West Sussex Archaeology, especially George Anelay, Stuart Needham

Hampshire Biodiversity Information Centre

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2. DESCRIPTION

2.1 GENERAL INFORMATION

Location & Site Boundaries [MAP 1]

Site: Petersfield Heath

Grid Reference: SU755229

County: Hampshire

District: East Hampshire

Total Area: 37.8 hectares (93.4 acres)

Petersfield Heath, also known as The Heath or Heath Common, is located on the outskirts of Petersfield in Hampshire, to the south east of the town centre. It is bounded by roads on all sides. The land slopes gently down on all sides to the pond and its outlet stream which occupy the lowest part of the site, with the highest point on a central knoll known as Music Hill. The site is surrounded on all sides by housing but still retains some views of the South Downs National Park to the south east.

Summary Description

This site is designated as a Town Green under the Commons Act 2006 for the recreation of local people and as a Site of Importance for Nature Conservation (SINC), confirming its value as a local wildlife site. In the 2018 HBIC survey the Heath is described as having 'a mosaic of habitats with large areas of heathland and acid grassland within a matrix of secondary woodland.' There are a number of notable species at the site (**APPENDIX 2 HBIC Notable Species Records 2019**). The SDNPA commissioned a series of protected species surveys in 2018, the most important of which include reptiles, bats and badgers. (**APPENDIX 3 Phlorum protected species surveys 2019**)

This site and its environs incorporate a nationally important assemblage of 31 prehistoric tumuli. Most of these are designated Scheduled Ancient Monuments - Hampshire County Monument no.84 - and have been the subject of recent archaeological excavations in 'The People of the Heath' Project organised by Petersfield Museum (**MAP 2 Petersfield Heath Bronze Age Barrow Cemetery & other archaeological sites, source: Stuart Needham**).

A 2019 visitor survey carried out by Petersfield Town Council has shown the site to be very popular with both local people and visitors from further afield (**APPENDIX 4 PTC Heath Visitor Survey**). The visitor pressures upon the site are considerable, with most pressure being concentrated around the pond, cafe and playground area. There are a number of different stakeholders using the Heath for such activities as conservation, fishing and organised sport, as well as two businesses, the Plump Duck Café and Boating and the Little School Day Nursery.

In the western part of the site, Heath Pond is an extensive but shallow, ground fed lake believed to have been dug in the 18th century to make an area of bog and pools safe for cattle grazing. It has a single outlet drain controlled by a sluice in the north east corner

which runs to the eastern edge of the site and small seepages and springs are believed to occur on areas of lower ground. Heath pond was deepened by suction dredging in the 1980's and is now used for boating and angling.

A contract to dredge the pond and stabilise the banks was in process before this plan was commissioned and the works commenced in December 2019. Any such major work in future should only be carried out if it can be clearly shown to promote the aims and objective of the current management plan.

Land Ownership/Tenure

- Owner: Petersfield Heath Trust (a charitable trust, the trustees of which are members of the Town Council).
- Management: Overseen by the Grounds Committee of Petersfield Town Council.
- Tenure: Freehold
- Date of Acquisition: 1914 & 1927 by the Petersfield Urban District Council
- Commoners Rights: Formerly Common Land, the site failed to be registered under the Commons Registration Act 1965. Part of the site is a registered Town Green.
- Access Rights: The whole site is registered as Access Land under the Countryside & Rights of Way Act 2000.
- Bylaws: Bylaws are in place, displayed on a notice at the Boat House on site.
- Agreements/leases: Heath Pond Association
Petersfield Cricket Club
The Little School Day Nursery
The Plump Duck/Boathouse

Site Infrastructure

Buildings on site include the café; the boathouse; the cricket pavilion; and the nursery school. Other site infrastructure includes the car parks; Millennium Path and other surfaced paths; the playground; fences; boardwalk; ditches; sluices; vehicular and pedestrian gates; fences; bins; benches; signboards; and revetments.

Map Coverage

Ordnance Survey maps of the site at 1:50,000, 1:25,000 and 1:10,000 scale are held in digital format on a computerised Land Management Information System at Petersfield Town Council. Copies may be printed from this system. In addition, the site appears on the following latest edition sheets:

Current

Ordnance Survey Landranger Series Sheet 197	1:50,000
Ordnance Survey Explorer Series Sheet 133	1:25,000
Ordnance Survey Sheet SU72	1:10,000

Historical

1950's Ordnance Survey Sheet SU72	1:25,000
1871 - 1880 Ordnance Survey County Series	1:10560
1700's Map of Hampshire, J. Rocque	2 inches per mile

Geological & Soils

Geological Survey of Great Britain (England & Wales)	1:50,000
Soil Survey of England & Wales Sheet 6: Soils of the South East	1:250,000

Photographic Coverage

Aerial photographs

An aerial photograph of the site in digital format is present as a layer on the Land Management Information System at Petersfield Town Council. Copies can be printed from this system.

Historical Photographs

A number of old photographs depicting The Heath are in existence, dating from Victorian times onward. It is believed one photograph, from 1895, shows a cricket match taking place, the barrow mounds plainly visible with the lack of woodland. Other photos (up to 1914) show few trees on The Heath except for pines planted on the barrows. It is recommended that a collection of these is made at PTC.

Access [MAP 1]

The Heath is designated as Open Access Land under the Countryside & Rights of Way Act 2000. Two public footpaths cross the Heath. One runs across the north of the site in an east/west direction and the other from south west to north east, passing to the east of the pond and to north of the cricket ground. The 64-mile long-distance Serpent Trail starts at Heath Pond and runs from north west to south east across the site. It passes through numerous heathland sites along its route eventually ending in Haslemere. The site is often used as a through route by local people accessing the town centre.

Vehicular access is available from two car parks, one in the north and the other in the south of the site. Vehicular access for site management purposes is also available at two points to the east of the café and playground.

Zones & Compartments [MAP 3]

A number of compartments have been identified in previous management reports and plans. In the 1993 Hampshire County Council Assessment Report, Dr Francis Rose identified 17 compartments, map details of which are now lost; while the North East Hampshire Heathlands Project identified 25 in their Heathland Restoration plan (**MAP 4**) drawn up for the same assessment. When the 2005 management plan was drawn up, neither of these maps could be found and a large number of new compartments were therefore identified. In the 1998 plan, compartment boundaries were not specifically mapped, although a prescriptions map does exist. Twelve woodland compartments were identified in the Woodland Management Plan (West, 2002) written to accompany the 1998 plan.

Due to the high number of compartments and the loss of accompanying compartment maps over the years, much confusion seems to have arisen. For the purposes of this plan therefore, the site is divided into four compartments only. These are Heath Pond and amenity grassland (1), heathland & acid grassland (2), woodland (3) and the cricket pitch (4). Whilst this maybe viewed as an oversimplification, it is considered that, at least until the

appointment of a Countryside Officer, the additional clarity it provides will enable PTC and FoPH to more easily manage the site.

It is expected that the four compartments proposed in this plan maybe further subdivided in the future on the advice of the appointed Countryside Officer when more detailed reference may be made to the historic compartments and current survey information.

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2.2 ENVIRONMENTAL INFORMATION

Physical

In 1993 a thorough report on Geology, Hydrology, Soils and Edaphic Relations at Petersfield Heath was produced by Ron Allen Associates, and published as an appendix to Hampshire County Council's Management Assessment Report (**APPENDIX 5**). This document, now partly lost, contained detailed information on all aspects of the site and is especially thorough in its coverage of the Physical aspects. Photos of the site before the golf club moved are contained in Appendix 2 to this Report and reference to the document is strongly advised. (**APPENDIX 5A**, 1993 HCC Petersfield Heath Management Assessment Report, App 2 Heath Geology, Hydrology, Soils & Edaphic Relations with special reference to heathland restoration)

Climate

The climate at this western end of the Weald, sheltered between the broad horseshoe of the Chalk Downs is hemi-oceanic with moderately warm, slightly moist and unexposed conditions (Climatic Classification of England and Wales, Bendelow & Hartnup, 1980).

Hydrology

The main surface feature is Heath Pond, an extensive but shallow, groundwater fed pond. There is a single outlet stream, controlled by a sluice, the first stretch of which is piped. Small springs and seepages occur occasionally on lower land. There are also two small seasonal pools, a series of small seasonal drains and three areas of high ground water.

Geology

The highest and lowest ground has sandy and loamy, often Flinty Head and River Terrace deposits, below which are Lower Greensand deposits (divided into the Folkestone Beds and Sandgate Beds) and a small area of Gault Clay. Sands and sandstones of the Hythe Beds underlie the site at depth.

Geomorphology

The chalk downs to the north, west and south overlook Petersfield from the western edge of the Weald. Heath Pond sits at the lowest point of a shallow outlet valley between gentle slopes.

Soils

A wide range of soils occur, from well-drained sandy podzols to soils with impeded drainage, and those affected by high groundwater.

Biological

Habitats/Communities (APPENDIX 6 2018 HBIC SURVEY)

Habitat	% Coverage of Site	Hectares (estimated)
Acid grassland	26	9.8
Lowland Heath	16.25	4
Secondary woodland	41	14.7
Open water & marginal vegetation	20.75	8.9
TOTAL	100%	37.4 hectares

Flora [MAP 5 NVC Communities 2018]

A number of botanical surveys have been carried out:

Surveyor	Area	Date
Dr Frances Rose	Whole site	1993
Ron Allen & Giles Groome	Wetland vegetation	2004
HBIC	Whole site	2004
HBIC	Whole site excluding lake	2018 (APPENDIX 6 2018 HBIC Survey)

- **Grasslands**

There are a number of grassland types on site which are dependent on specific soil conditions such as acidity, nutrient levels and waterlogging.

- **Lowland dry acid grassland [MAP 6 - U1b, U4a, MG1, MG6, MG7]**

Notable species on the site include *Poa bulbosa* (Bulbous meadow grass) first recorded in 1993 by Francis Rose and subsequently in the 2004 and 2018 HBIC surveys. *Trifolium glomeratum* (Clustered Clover) was recorded in 1993, but not since, and *Crassula tillaea* (Mossy stonecrop) was recorded in 1993 and 2004 but not in 2018. All species were recorded on the short, dry acid grasslands to the north of the lake. Francis Rose noted that these species all rely on trampling to maintain the short sward, which is obviously now caused primarily by visitor pressure rather than grazing.

In 2004 most of the grassland at Petersfield Heath was recorded as MG6 species poor grassland, dominated by *Agrostis capillaris* (Common Bent) - possibly associated with previous golf course management. By 2018, only one small area was recorded as MG6 in the centre of the site. Even in heavily trampled areas in the north west corner of the site, where reseeding has occurred in the past, species richness is recovering. Many areas have now succeeded to a more species rich semi natural sward, classified in 2018 as U1a/b (**MAP 6** lowland dry acid grassland). This classification is typically rich in spring flowering annuals, found on the warm, sandy acid soils of southern England. It is often associated with over grazing of heathland or a reversion to heathland following temporary cultivation, as in this case. Abundant grasses include *Agrostis capillaris* (Common bent) and *Rumex acetosella* (Fine leaved sheep's fescue). It can be managed either through cutting and removing the arisings or by a balanced grazing regime.

On the cricket field, where management is undertaken by the cricket club, the grassland was recorded as MG7 in 2004 and in 2018 as U4a (**MAP 7 Cricket Pitch**), illustrating a reversion from a more intensively managed, reseeded sward. *Agrostis capillaris* was dominant, with a number of other species abundant in this area, including *Danthonia decumbens* (Heath grass) - an acid grassland indicator species. A notable species recorded here is *Potentilla erecta* (Tormentil). In 2018 *Chamaemelum nobile* (Roman chamomile) was not recorded on the cricket pitch. A future survey is recommended in the spring/early summer to establish if this notable species, once recorded, is still present.

There are several patches of *Arrhenatherum elatius* (False Oat grass) throughout the site, recorded as MG1. The largest area is on the old fairway to the north east of the pond, running in a north, south direction. (**MAP 7 Old Fairway lowland dry acid grassland**)

The amenity area was recorded as largely MG7, *Lolium perenne* leys (Perennial Ryegrass) (**MAP 7 Amenity Grassland**).

o **Rush Pasture/Mire** [**MAP 8 - M23b, M25a, M25b**]

Purple moor grass & rush pasture is a priority habitat. It consists of a moist, tussocky sward dominated by *Molinia caerulea* (Purple moor grass) and *Juncus* sp. (rushes). At Petersfield Heath where soils are more acid and moisture retentive, HBIC have recorded three different classifications of this vegetation type in association with other plant species such as *Potentilla erecta*, *Festuca filiformis*, *Agrostis capillaris*, *Succisa pratensis* and *Calluna vulgaris*. It can be managed by a balanced mowing or grazing regime or a mix of both management methods. It is recommended that attempts are made to join up these fragmented areas especially in the area to the north of the outlet channel

• **Heathland** [**MAP 9 - H1a, H2 & M16**]

Since 2004, when the first Phase II survey was carried out following the departure of the golf club from the Heath, there has been an overall improvement in the area of lowland heath, especially in the south of the site.

Lowland heath is a priority habitat. Current management is focused on maintaining a mosaic of open vegetation by cutting back invasive scrub and is carried out by PTC and FOPH. Most stands of heather were recorded in 2018 as H1a, *Calluna vulgaris*-*Festuca ovina* which is typically found on well drained, nutrient poor soils. It is species poor and dominated by *Calluna vulgaris* of variable density.

In the north of the site there is some evidence of *Lochmaea suturalis* (Heather beetle), a naturally occurring species across Britain. The larvae and to a lesser extent, the beetle, feed on the leaves of the heather, stripping them bare. In a normal year, the heather will usually recover in a few months. According to the Heather Trust (heathertrust.co.uk), who have been recording outbreaks since 2006, populations in 2019 were unusually high. At Petersfield the frequency and extent of outbreaks should be monitored.

In the south of the site where it is rather less free draining some of the vegetation has been classified as H2, H2a and H2c, *Caluna vulgaris*-*Ulex minor*. Small areas of wet heath (M16 *Erica tetralix*-*Sphagnum compactum*) dominated by *Molinia caerulea*, *Calluna vulgaris*, *Erica tetralix* and *Juncus squarrosus* are present in a mosaic with M25b and M23b in an area in the centre where woodland or scrub may have been cleared as described above.

- **Secondary Woodland and Scrub [MAP 10 - W16, W10, W1, W6, W24, W25]**

The 2018 survey states 'All woodland on the site appears to be secondary, some of which was originally planted but most may be invasive over former heath or grassland'.

Most of the woodland areas at this site are now dominated by *Quercus robur* (Pedunculate oak) with *Sorbus aucuparia* (Rowan), *Betula pendula* (Silver birch), *Ilex aquifolium* (Holly) and *Pinus nigra* (Black pine) present in some stands. In 2004 most were classified as W10.

Today large areas in the north and south east corners of the site have been classified as W16 (*Map 10*) *Quercus* spp.-*Betula* spp.-*Deschampsia flexuosa*. The shrub layer is poorly developed and of variable density dominated by *Rubus fruticosus* (Bramble) and *Pteridium aquilinum* (Bracken) with scattered *Ilex aquifolium* and *Ulex europaeus*. The ground layer is poor or absent. There are frequent mosses including *Eurhynchium praelongum*, *Hypnum jutlandicum* and *Sceleropodium purum*. There is a sparse cover of *Hedera helix*, *Agrostis capillaris*, *Molinia caerulea*, *Deschampsia flexuosa* and tree seedlings including *Ilex aquifolium* and *Sorbus aucuparia*.

Since 2004, the woodland immediately to the south and west of the lake has been classified as secondary W10c, *Quercus robur*-*Pteridium aquilinum*-*Rubus fruticosus* with a subcommunity of *Hedera helix*. This area is dominated by *Quercus robur* with *Acer psuedoplatanus* (Sycamore), *Crataegus monogyna* (Hawthorn), *Betula pendula* (Silver birch), *Sambucus nigra* (Elder), *Fraxinus excelsior* (Ash) and *Salix cinerea* (Grey willow) over a field layer of *Rubus fruticosus* (Bramble), *Urtica dioica* (nettles) and *Carex pendula* (Pendulous sedge).

Immediately, to the northeast of the pond there is a smaller area of woodland, including dense scrub, dominated by *Salix cinerea* and *Rubus* sp with increasing cover from other willow species. In 2004, this was classified as W6 *Alnus glutinosa*-*Urtica dioica*, sub-community *Salix fragilis*. Today it is classified as W1, *Salix cinerea* woodland (**MAP 10**), which grades into an area still classified as W6 (**MAP 10**)

In the 1993 NE Hants Heathland Project 10-year plan, this area (**MAP 4, Compartment 3**) was described as the main area where silt was dumped after the pond was dredged in the 1980s. At that time, two stands of Willow scrub had been created, some acid grassland was returning, and an area sown with wildflowers, the prescription was to cut and remove the arisings. This does not appear to have been followed, as the 2004 survey describes the area to the north east of the pond as 'heavily worn amenity grassland with gorse dominated

scrub and an old wooded pond with a canopy of crack and white willow and a dense shrub layer of grey willow.’ In 2005 this area is described as a stand of wet woodland.

Woodland margins contain dense stands of *Rubus* spp and *Pteridium aquilinum*. (**MAP 10**)

- ***Open Water and Marginal Vegetation [MAP 11]***

The lake was not surveyed in any detail by HBIC in 2018. The marginal vegetation is sparse particularly in the north west corner where visitor pressure is high and considerable erosion has occurred due to both this and wave action on the lake. Any vegetation is largely confined to the eastern margins where there are small stands of S4a *Phragmites australis* swamp, *Phragmites australis* sub-community and S23 Other Water-margin Vegetation. These vegetation classifications are often found on enclosed water bodies and are species poor. It is thought that this marginal vegetation was established a few years ago following a project to stabilise the bank in this area of the lake. There is one artificially constructed island in the north of the lake, thought to have little wildlife value. A programme of works devised prior to commission of this plan and commenced in December 2019 propose to dredge the pond, construct two additional islands from dredged silt and further stabilise the banks.

The lake is currently used for boating, managed by Ian Baker of the Plump Duck Cafe and fishing, managed by the Heath Pond Association. The north bank is very popular with visitors due to its proximity to the town, the Plump Duck café, recreation ground and picnic area. The results of a recent visitor survey conducted at the site by Petersfield Town Council illustrate the visitor pressures on the site and PTC have particular concerns regarding this area. PTC would like to encourage visitors to explore the eastern side of the site more.

The café sells grain to feed the waterfowl which, although is very popular with visitors, has artificially swollen waterfowl numbers and is likely to attract rodents. This may in turn pose a health and safety risk of water borne diseases including *Campylobacter* and *Leptospirosis* to visitors. Higher nutrient levels may also occur as a result and cause a reduction in water quality at the lake. No regular water testing is currently thought to take place.

Fauna

- ***Protected Species***

In 2018 the SDNPA commissioned a number of surveys of protected species on site. The surveys included bats, badgers, dormice, reptiles and an Environmental DNA (eDNA) survey of the lake and two ponds on adjacent land, including the pay and play golf course and a private garden pond.

- ***Bats***

Eight different bat species were recorded at the Heath. Three of these were new records for the site, *Barbastelle*, *Nathusius's Pipistrelle* and *Leisler's bat*. *Barbastelle* and *Nathusius's Pipistrelle* bats are both rare. *Barbastelle* is a UK BAP species and therefore a conservation priority species at both a national and local level. Other bats recorded at the

site both in 2018 and previously include Pipistrelle sp. (Common Pippistrelle), Myotis daubentonii (Daubentons), Plecotus auratus (Brown Long-eared), Eptesicus serotinus (Serotine) and Nictalus noctule (Noctule). The presence of Myotis mystacinus (Whiskered bat) could not be confirmed in 2018, due to the difficulty of interpreting the spectrogram for Myotis sp.

The site as whole is considered to provide a dynamic and varied habitat with good potential to host roosting, foraging and commuting bat species. In total, 22 trees on site were assessed as having potential bat roosting features, numbers 10 to 17 having most potential. (**MAP 12** *Phlorum tree assessment and bat survey*). These features include woodpecker or rot holes, dense ivy cover and loose bark.

In 2018, a high level of foraging and commuting activity was recorded at the Heath but no roosts could be confirmed. The heaviest concentration of bats was found around the pond, along the footpaths and associated tree lines. The most frequent bat recorded was Pipistrelle sp.

The main recommendations, made by Phlorum, to encourage bats at Petersfield Heath are as follows:

Reduce light pollution from surrounding areas through use of appropriate tree species on boundary.

Encourage invertebrate numbers by leaving areas of scrub, log piles, bare ground and avoiding use of chemicals on site.

Management of ecotones.

Encourage roosting sites by leaving standing dead wood especially Quercus robur (Pedunculate oak) wherever possible.

Encourage local bat groups to survey and monitor the site. A further survey of the two fields to the east of the site and of the golf course to the south was also recommended.

o **Badgers**

Despite there being an established badger sett in the north of the site, recorded in the 2005 management plan, only a single disused sett was found during the 2018 survey by Phlorum. This is in a dense area of scrub, in the south east corner of Petersfield Heath. (**MAP 13** *Phlorum Badger survey 2018*) Several fresh latrine sites were also found not far from the carpark, with pathways running parallel with Sussex Rd to the junction with Heath Rd East. It is thought that the site is used by a number of badgers to forage and commute. However, due to the high visitor numbers and in particular, dog walkers, it is considered that badgers are likely to be deterred from the construction of setts, often disturbed by dogs.

However, it is known that members of the Friends of Petersfield have been monitoring badgers on site for some time and consultation with them is highly recommended.

o **Dormice**

There are six records of dormice within a radius of 2km of Petersfield Heath between 2010 and 2017. Despite the woodlands on site having reasonable species and structural diversity they are considered too fragmented and small to support dormice. The hedgerows surrounding the site to the north and east are of low species diversity, too narrow and cut too frequently to provide good Dormouse habitat. Furthermore, there is no arboreal connectivity between woodland on the Heath and other woodland blocks nearby, the nearest being at the River Rother and at Nursted Copse and these too, are disconnected from the wider countryside.

No evidence of Dormice was found during the survey in 2018 by Phlorum. Some recommendations were made in their report to improve the connectivity of Dormouse habitat in the surrounding area. Reference to their survey is advised for further information.

o **Reptiles**

Reptiles require a diverse habitat structure, with open areas for basking close to vegetation providing shade and cover from predators. A mix of wet and dry habitats in close proximity enables active reptiles to cope with very dry weather and tree roots and disused mammal tunnels provide night-time shelter.

Reptiles need good ground cover with a plentiful and varied food source of soft bodied invertebrates. This enables them to feed, breed and disperse under cover. South facing slopes can provide suitable hibernation spots underground away from the risk of frost, flood or predators. Although Slow worms and Common lizards give birth to live young, they still require a habitat with a sheltered, humid micro-climate. Other reptiles have more specific breeding requirements.

There are three areas of Petersfield Heath which provide suitable habitat to support reptile populations (**MAP 14 Phlorum Reptile survey 2018**). These are the area south west of the cricket pitch and the two areas of grassland in the south east corner of the site which run parallel to Heath Road. This suitable habitat consists of a mosaic of rough grassland, heathland and woodland edge. The area south west of the cricket pitch returned the best results

In the past *Anguis fragilis* (Slow Worm), *Vipera berus* (Adder) and *Natrix helvetica* (Grass Snake) have all been recorded at Petersfield Heath. The 2018 survey confirmed the presence of a low population of Slow worms and a surprisingly good population of *Zootoca vivipara* (Common lizards). However, no Adders or Grass snakes were found during the survey. Neither *Lacerta agilis* (Sand lizard) nor *Coronella autriaca* (Smooth snake) were found, however this is perhaps not surprising as they are now rare.

It is estimated that the site currently supports 120 adult Common lizards and 40 adult Slow worms.

The main threats to reptiles at Petersfield are:

- Lack of habitat management, causing habitat loss through shading
- Fragmentation of habitat
- Fire
- Predation by domestic cats
- Disturbance due to public access from people and dogs

It is considered that suitable reptile habitat could be increased by 3 ha if appropriate management prescriptions were adopted. The main recommendations are:

- Reduce the area of coarse grasses and improve both the extent and structural diversity of heathland on site to increase areas of suitable terrestrial reptile habitat from 20% to 32%
- Create reptile friendly connections between areas of heathland on site to increase their possible range
- Construct artificial refugia
- Avoid large scale clearance of bracken and other suitable habitat over a short timescale. Make small changes only on a rotational basis to ensure structural diversity
- Leave some areas of scrub and bracken uncut, especially if adjacent to hibernation sites to provide a warm micro-climate for their emergence in spring. i.e. south facing
- Clearance work to be carried out in June and July only
- Regularly survey and monitor success of habitat management and for the presence of Adder and Grass snake.

o ***Great Crested Newts and other amphibia***

In 2018 an eDNA survey was carried out at Petersfield Lake, at the pay and play golf course and in a private garden. Although suitable habitat exists, no evidence of Great Crested Newts was found. A data search was made covering a 2 km radius of the site which proved negative.

It is considered that artificially high fish and wildfowl populations in the lake will disadvantage other amphibians found on site. Both will prey on amphibians and wildfowl will strip the marginal vegetation, removing cover and egg laying substrate. To encourage amphibians generally there are some habitat enhancements which will benefit them. These include:

Cut the amenity grassland adjacent to the pond early in the season and ensure mowing in the summer months is kept to a minimum.

Leave the adjacent amenity grassland slightly longer.

Improvements to marginal vegetation and the construction of log piles will provide cover from predators, hibernation sites and the dead wood will encourage invertebrates.

Stop feeding wildfowl to improve water quality of the lake and reduce amphibian predators.

All of these habitat improvements will help to increase invertebrate populations at the site not only benefiting invertebrates themselves, but also reptiles and bats. The adjustments to the cutting regime will help to avoid damage to emergent frogs and toads.

➤ ***Invertebrates***

In 1999 Mike Edwards conducted an Entomological survey at Petersfield Heath (**APPENDIX 7**). Since then individual recordings have been made. There are a number of sensitive butterfly species that have been recorded on site. In 2018, *Coenonympha pamphilus* (Small Heath) was recorded and there is a record for *Limenitis camilla* (White Admiral) in 2006. *Pyrgus malvae* (Grizzled skipper) has been recorded on several occasions, the last being in 2011. Several county rare moths have also been spotted. In 2017, *Lucanus cervus* (Stag beetle) was recorded and *Omocestus rufipes* (Woodland grasshopper) was recorded in 2013.

In 1999, two Red Data book species were recorded on site, these were *Philanthus triangulum* (Bee Wolf) and *Ceratina cyanea* (Carpenter Bee). The Bee Wolf has since extended its range and is now a lot more common. It is still present at Petersfield Heath and can be seen on the bare sand just south of the Nursery School. It is not known if the Carpenter Bee is still present on the site and further surveys are required to confirm. *Argiope bruennichi* (Wasp Spider) was recorded in 2004 but it is unknown whether it is still present.

➤ ***Fish***

There is a good range of native freshwater fish present in the lake including *Abramis brama* (Bream), *Esox lucius* (Pike), *Perca fluviatilis* (Perch), *Rutilus rutilus* (Roach) and *Scardinius erythrophthalmus* (Rudd) it is likely that *Cyprinus carpio* (Carp) are from stock introduced by the fishing club. The lake was historically overstocked and problems with Blue-Green Algae have occurred in the past. Today there is less fishing, however priority should be given to natural regeneration of fish stocks to increase the invertebrate population thereby benefiting protected species and other wildlife at the site.

● ***Birds***

In the past winter visitors to the pond have included *Aythya fuligula* (Tufted duck), *Anas penelope* (Wigeon), *Aythya farina* (Pochard), *Anas Clipeata* (Shoveler), *Bucephala clangula* (Common Golden Eye), *Phalacrocorax carbo* (Cormorant) and *Podiceps cristatus* (Great Crested Grebe). *Alcedo atthis* (Kingfisher) have been an infrequent visitor. In the scrub and reeds around the pond *Acrocephalus schoenobaenus* (Sedge Warbler) and *Emberiza schoeniclus* (Reed Bunting) have been heard in the summer, and *Sylvia atricapilla* (Blackcap) and *Sylvia communis* (Whitethroat) have used use the scrub elsewhere on the site, where also *Acanthis cannabina* (Linnet) has been seen in the winter. *Buteo buteo* (Buzzard) and *Accipiter brevipes* (Sparrowhawk) often fly over the site.

In 2004, during a botanical survey *Chlidonias niger* (Black tern) was present on the pond for two days. Black tern is a Schedule 1 species and as such, afford special protection all year

round. It frequents freshwater lakes where it looks for food on the surface of the water. A more thorough bird survey is recommended.

Today wildfowl occur in good numbers at the pond, especially *Alopochen aegyptiaca* (Egyptian goose) which can be seen all year round. It is likely that the population is maintained at an artificially high level by the selling of 'duck food' at the Plump Duck Cafe.

A survey and collation of any historic fauna records is recommended and maybe something the FoPH would be willing to help with in the future.

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Cultural

Archaeology (People of the Heath Project Report, George Analay/Stuart Needham to provide)

Petersfield Heath is an extremely important archaeological site, containing Scheduled Ancient Monument Hampshire No. 84. Between 2014 and 2018 Petersfield Museum, funded by a Heritage Lottery grant, hosted a community project called 'People of the Heath'. This project focussed on the prehistoric monument complex, dating to the early Bronze Age (2200 – 1500 BC), located on and around Petersfield Heath. First mapped in the 1930's, no excavations of the barrows had previously been recorded. From 2014, over the 4-year period, a number of the barrows were excavated to determine how the people lived and died on the Heath. Three new barrows were discovered and some, already included in existing records, despite being Scheduled Ancient Monuments, were discovered in fact not to be barrows but other archaeological sites, such as Mesolithic flint sites were found.

(MAP 2 Petersfield Heath Bronze Age Barrow Cemetery & other archaeological sites, source: Stuart Needham)

Land Use

Many heathlands originate from the Bronze Age some 3000 years ago, but Petersfield Heath is thought to have existed before the barrow mounds were built in the early Bronze Age and may therefore have been created up to 5000 years ago, following clearance of trees growing on poor soils, to provide fuel and land to grow crops or entice game. Its origin was probably similar to other commons of the formerly extensive heathland of the Weald. To the east, large areas of heather once existed with wet heath on damp slopes and valleys, maintained by grazing cattle, sheep and horses.

Although one of our most wild habitats, heathland is man-made, and its survival today depends on human intervention. The landscape was maintained over thousands of years by continuous clearance of trees, bracken and gorse and stock grazing, which kept soil nutrient levels extremely low and acidity high. Plants previously confined to coasts and clifftops, were able to expand into other areas wherever the thin soils were suitable.

If left unmanaged, heathland will gradually succeed to woodland with soils becoming enriched, and consequently unsuitable for heathland flora and fauna. As heathlands became part of our farming system, constant disturbance through grazing and other human activity prevented this natural succession. Although there have been considerable changes in agriculture which have adversely affected this type of habitat, today it is valued for its cultural heritage as well as its unique wildlife.

<https://www.hiwwt.org.uk/habitats/heathland-and-moorland>

Written records indicate Petersfield Heath was open common land in the Medieval Period with rights for grazing and peat cutting. The 1859 Enclosure Act allowed fencing of the Heath. Heath Pond, formerly a marshy area with a meandering outlet stream, was dug in 1735 to make the area safer for cattle and since the 1820s, the Taro Fair has been held on

The Heath, its main business was once the sale of livestock. Since Victorian times, there have been a number of sports played on the site, including football; cricket; hockey; ice hockey; tennis; and golf.

Following the introduction of the golf club in the late 1800's and the demise of grazing in the 1920's, the heath became more intensively managed with the use of fertilisers to 'improve' the grassland. Until 1997, when the golf club left Petersfield Heath, the site formed one of a growing number of heathland areas lost or fragmented due to changes in agriculture and development. Since then however, Petersfield Town Council has pursued a different strategy and introduced a shift towards natural habitat management, which has led to some improvement in the quantity and quality of heathland on the site and consequently attracted increasing numbers of visitors and wildlife alike.

Today the site is a designated a SINC and contains a high number of SAM's. It is now managed by Petersfield Town Council for recreation, conservation and archaeology.

Public Interest

Petersfield Heath is one of 13 areas of open space around Petersfield, highlighted as significant in the Petersfield Neighbourhood Development Plan 2013-2028. Together with the other sites, it forms an important link between Petersfield and the surrounding countryside of the South Downs National Park.

Recreation: It is both used for formal and informal recreation, including cricket; fishing; boating; feeding ducks; dog walking; walking; and there is a children's play area. Older children and young people also enjoy the site and it is thought that this may sometimes contribute to a perception of anti-social behaviour on the site. Rough sleepers have also been an issue in the past.

Conservation: There is considerable appreciation of the wildlife on site by local people which has been surveyed in some depth. The Friends of Petersfield Heath command much support, illustrated by the volunteer numbers in attendance at their regular work parties.

Archaeology: Excavations of the barrows were made, with the help of local volunteers and an exhibition of the findings was held at the museum following the 'People of the Heath' project 2014 to 2018. The findings of this project are currently being written up and when published should be considered with this plan.

Past Management for Nature Conservation, Recreation & Archaeology

Early Bronze Age barrows were first mapped at Petersfield Heath in the 1930's, however no previous excavations had been recorded prior to 2014. From 1898 until 1997, the Heath was partly leased to Petersfield Golf Club and following this and the demise of cattle grazing in the 1920's, it has been largely managed for public recreation. The Heath has been the site of the Taro fair for many years. Held annually on 6th October, this used to be a horse fair but is now just a funfair. Other activities have included boating, cricket, tennis and fishing.

The first management recommendations for nature conservation were made in 1993 by Hampshire County Council after it was announced that the golf course would close in 1997. The recommendations were drawn up following extensive research from a number of

experts including the North East Hampshire Heathlands Project; the prominent botanist Dr. Frances Rose; and environmental consultants, Ron Allen Associates. Since this date there have been four further management plans written for the site, all with the aim of balancing the interests of conservation, archaeology and recreation.

Practical management by Petersfield Town Council is carried out by their Grounds Team. Outside contractors are sometimes used. Work consists of regular mowing of the recreational area, to the north of the lake, through the summer months and maintenance of buildings and other infrastructure such as bins, signage and seating. During the winter months vegetation clearance and coppicing is carried out in the eastern part of the Heath and around the edge of the lake. Particular attention is paid to some of the barrows.

Friends of Petersfield Heath also have an annual work programme drawn up by members and approved by Petersfield Town Council. Weekly work parties are well supported by local volunteers throughout the winter. Tasks include, scrub management to maintain open areas of heath and grassland, woodland management to maintain good structure, dead hedging, path maintenance and some surveying and monitoring.

Some habitat management at the lake is carried out by Heath Pond Association.

In summer, bat walks are held at the site which are open to the general public and the Secrets of the Heath has been held annually for several years. This event is organised by The South Downs National Park Authority, to promote an understanding of heathland habitats.

Many management recommendations have been followed but, due to financial and time constraints, some of the implementation has been piecemeal.

Ecological Relationships and Implications

Lowland heath is found on areas up to 300m above sea level. As discussed, it is characterised by thin sandy soils with low nutrient levels which in the past were managed by grazing and/or cutting and clearance of vegetation. Typical plant species include heathers, gorse and grasses. Specialist fauna associated with heathland include ground nesting birds, reptiles and invertebrates.

If left unmanaged, natural succession will cause the soil to become enriched and allow more vigorous plants to establish, eventually leading to woodland. At Petersfield Heath, the trend is for seral succession to rankness, scrub and woodland. With the closure of the golf club and some habitat management taking place in more recent years, this process has been slowed. However, to ensure survival of the heathland, constant management is required either through the reintroduction of grazing or by cutting and most importantly, removing vegetation on an annual basis. Without this essential management, the flora and fauna associated with acid grassland and heathland remains under threat at Petersfield.

3. EVALUATION & OBJECTIVES

3.1 STATUS OF THE SITE

Planning History of the Site

The Petersfield Neighbourhood Plan 2013-28 recognises the Heath as one of 13 sites in Petersfield which provide important links between the town and the wider countryside of the South Downs National Park. Its SINC designation makes it one of more than 4000 special areas across Hampshire, known nationally as Local Wildlife Sites and raises awareness of their importance for wildlife, providing some protection with regard planning and land management. Along with many of the 12 other sites in Petersfield the Heath is also designated as Open Access Land which gives the public a right of access under the Countryside & Rights of Way Act 2000. The Town Council now aims to provide an integrated management approach to all 13 sites for the benefit of local people and to strengthen and create wildlife corridors in and around the town.

The Site in a Wider Perspective & Implications for Management

Petersfield Heath is at the south-westerly point of a once large area of heathland extending across the Greensand of south-west Surrey and the Sussex Weald. Indeed, it is designated a Site of Importance for Nature Conservation (SINC) for its heathland, notable plant and animal species including bats and reptiles.

It is also an important site for archaeology with more than 21 Early Bronze Age barrows, 21 of which are designated as Scheduled Ancient Monuments (SAM). Following the imminent publication of the final report from the recent 'People of the Heath' archaeological project, it is advised that this plan should be modified accordingly.

Finally, the site is an important recreational facility in the town and local area. To retain the intrinsic value of the Heath this visitor pressure must be managed sustainably, so that both the archaeology and the nature conservation value of the site is protected.

Illegal or Potentially Damaging Operations

The following potentially damaging operations should only be carried out in accordance with this plan following prior assessment by the steering group and/or Countryside officer.

- Cultivation, including ploughing, rotovating, harrowing, digging of scrapes and re-seeding
- Changes in the mowing, cutting, grazing regime
- Application of chemicals, failure to remove arisings
- Discharge or spreading of any materials on site
- Burning
- The release of any wild, feral or domestic animal, plant or seeds
- The killing or removal of any wild animal

- The destruction, displacement, removal or cutting of any plant including trees, shrubs, herbs, hedge, dead or decaying wood, moss, lichen, fungus, leaf mould, turf
- Tree/woodland management to include planting, clear felling/thinning/coppicing, changes to species composition, cessation of management
- Drainage
- Modification to water courses
- Management of aquatic and bankside vegetation for drainage
- Changes to water levels/table
- Infilling of ditches, dykes, ponds, pools, marshes
- Introduction of fish or other aquatic animals
- Changes in angling practice
- Reclamation of land from lake
- Extraction of minerals
- Construction of roads, tracks, walls, fences, hardstanding, banks, ditches or other earthworks or the laying, maintenance or removal of cables
- Storage of materials
- Erection of structures
- Use of vehicles or craft likely to destroy or disturb wildlife habitats
- Modification of natural or manmade features
- Removal of material
- Game and waterfowl management

3.2 EVALUATION OF FEATURES

Evaluation of Important Features

Size

Currently some of the eastern half of the site is mown in an attempt to restore the heathland and acid grassland habitats. The cutting programme is carried out by a mix of hand cutting by volunteers; use of tractor and forage harvester by private contractors; and flail mowing by the PTC Grounds Team. Removal of arisings from the site presents a major issue and considerably increases the cost of management.

This area is of sufficient size to graze on a sustainable basis for conservation and this option should be thoroughly investigated as it may both benefit the ecology and reduce the cost of management. However, there are two other important factors to be considered before any decision can be made, these are the archaeology and the visitor pressure on the site.

Diversity

There is a wide diversity of habitats on this site including rush pasture; dry acid grassland; heathland; scrub; woodland; open water and marginal vegetation. Practical habitat management is necessary to retain this diversity and all attempts should be made to maintain and enhance it, whilst preserving the important archaeology and supporting the recreational opportunities that this site provides.

Naturalness

The Heath has been extensively managed by man in the past, from the Bronze Age to current times. With the addition of a golf course in the 18th century and the cessation of grazing in the 1920's, the extent and quality of the acid grassland and heathland declined. In more recent years this trend has begun to reverse. Our interference should continue to add value to the site.

Rarity

Purple Moor grass and rush pasture; lowland heath; and dry acid grassland are all classed as priority habitats which support a number of rare and notable flora and fauna at Petersfield Heath including *Calluna vulgaris* (Heather), *Erica tetralix* (Cross leaved heath), *Erica cinerea* (Bell heather), *Nardus stricta* (Mat grass), *Poa bulbosa* (Bulbous meadow grass). It also plays host to at least two reptile species, Common lizard and Slow worm; eight species of bat; a number of nationally scarce invertebrates including Stag beetle and Woodland grasshopper and several species of solitary bee and wasp.

Fragility

In the absence of management, the trend is for seral succession to rankness, scrub and eventual woodland over much of the site. This means constant management is necessary to retain the features of interest. Scrub should not be allowed to encroach over the grasslands and heathland, especially in the east of the site. Cutting and clearing or grazing at low stocking rates will be a necessary management activity, whilst protecting and preserving the archaeology. Furthermore, increased fragmentation of the site and its ecological isolation from others in the area is a threat to its conservation, as is visitor pressure and with the threat of fire, vandalism and littering.

Typicality

This site is typical of a fragmented habitat once part of a much bigger unit, in this case the extensive heathland of the Weald to the east.

Recorded History

This site is well documented in more recent years both for its conservation value and archaeological importance.

Position in Ecological Unit

This site is the most south westerly point of a formerly extensive area of heathland to the east of Petersfield and is one of 13 sites identified in the Neighbourhood Plan 2013-2028 in and around Petersfield providing an important link to the wider countryside of the South Downs National Park. However, its increasing isolation will limit opportunities for recolonization from other unimproved sites.

Potential Value

The ecology of this site has suffered from its isolation and limited management. With the appointment of a Countryside Officer to help realise the aims of this management plan and the Petersfield Neighbourhood Plan and the creation of a Steering Group to inform, advise,

guide and monitor an annual programme of practical habitat management, it is hoped that PTC will be able to fully realise the three main management aims for the site.

Intrinsic Value

For a broad spectrum of reasons, the appeal of Petersfield Heath to local people is considerable (**APPENDIX 4**). It is a valued recreational area close to the centre of the town and an important archaeological site. Any management strategy, therefore, must recognise the sensitive nature of the site to ensure a balanced approach to protect and enhance it.

Identification of important features

To provide effective management of the Heath, important features at the site need to be identified and evaluated. Each feature is likely to require different management objectives. In addition to these features there are a number of services provided by the site which require management objectives such as interpretation & information, health & safety and management communications.

The table on the following page identifies important features for management.

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TABLE 1 Important Features, Conservation

FEATURE	TYPE	IMPORTANCE	N	C	L
Whole reserve	Conservation	Mosaic of lowland heath, wet & dry acid grassland & secondary woodland compatible with public recreation. Notable habitats/flora & fauna.		*	*
Heathland	Conservation	Wet & dry heath, UK BAP priority habitat, once part of a more extensive area of heathland to east. In C20 habitat decline due to unsuitable management. Further recovery possible with suitable management. Notable species Heather, Bell heather, Cross leaved Heath.	*	*	*
Dry Acid Grassland	Conservation	Dry acid grassland, open, patchy on sandy soil, trampled, worn, grading to heath. Improved with fertiliser, mowing & reseeded for fairways. C20 national decline in acid grassland, often scarcer than heathland. Further recovery possible. Notable species Woodland grasshopper, Clustered clover, Bird's foot clover (1993) Subterranean clover, Bulbous foxtail (2019), Mossy stonecrop, Fiddle dock, English stonecrop, Goldenrod.	*	*	*
Rush Pasture/Mire	Conservation	Species poor vegetation, moisture retentive soils. Uk likely holds more rush pasture than rest of Europe. Loss largely due to agricultural improvements/lack of appropriate management. Some potential to increase species diversity.	*	*	*
Woodland/scrub	Conservation	Mostly secondary woodland, some planted. Some scrub invasive over former heath/grassland. In 2005 similar in area to grassland/heathland combined. Today, woodland/scrub areas are roughly 10% smaller than the heather/grassland areas there may have been some encroachment onto open areas. Notable species 8 bat species, badgers, various invertebrates. Nationally scarce stag beetle (2017) Hants BAP species.			*
Drainage ditches	Conservation	Once a meandering stream, part of marshy valley running east from pond, contained one of Britain's rarest plants, <i>Ludwigia pelustris</i> (Hampshire purslane). First found in C17, last recorded in 1848, likely disappeared when ditch changed			*

TABLE 2 (cont'd) Important Features Recreation/Services

HABITAT	TYPE	IMPORTANCE	N	C	L
Pond/ Marginal vegetation	Conservation/rec	8.9 ha groundwater fed lake, dug in C18 for drainage, limited conservation value, important for public recreation. Notable species include Ranunculus flammula (Lesser spearwort)			*
Cricket Pitch	Conservation/rec	Leased by Petersfield CC who manage pitch & outfield. Notable species Chamomile, Hants BAP species, on pitch.			*
(Dog) Walking	Recreation	Public use since 1913. Millennium circular path surrounds pond.			*
Angling	Recreation	Established use of Pond by angling club. Disabled access.			*
Boating	Recreation	Established use since 2019 includes pedalos & rowing boats.			*
Bronze Age Barrows	Archaeology	One of most impressive & well-preserved barrow cemeteries in SE England with > 21 early Bronze Age monuments.			*
Café/toilets	Services	Café leased privately. Toilets serviced & maintained by PTC.			*
Playground	Services	Provided & maintained by PTC			*
Information/ Interpretation	Services	Large no. site signs, many recently installed.			*
Carparks	Services	2 small carparks, north/south.			*

Key: N - National, C - County, L - Local

Ideal Management Objectives

In this section we set out ideal management objectives for the important features in the table above as well as objectives for the management and administration of the site as a whole.

Conservation

To maintain and enhance the habitat diversity and minimise fragmentation

To conserve and increase the area of heathland

To conserve and increase the species richness of the acid grasslands

To restore connectivity between areas of remnant heathland and acid grassland both on site and locally

To create and maintain a mosaic of long and short swards with some stands of scrub to encourage reptiles and invertebrates

To clear and remove all arisings from site management works wherever possible

To consider current and historical surveys and recommendations to inform habitat management decisions.

Any further pond works to be approved by the Steering Group prior to works commencing.

Wider environmental considerations to be taken into account

Steering Group to further consider cattle grazing given the constraints of such a popular site and the presence of reptiles

Steering Group to consider dogs on lead only, during the nesting season, 1st March to 31st July in the eastern half of the site

Steering Group to consider appointment of specialist to address problems of both bank and path erosion around the café and playground areas. Any work must take into account the conservation and archaeological value of the site and historical survey records must be considered before any planting plans are drawn up. In particular, regard must be paid to any notable plant species recorded in the area in the past (eg. *Crassula tillaea*, *Trifolium ornithopioides*, *Trifolium subterraneum*, *Trifolium glomeratum*, *Poa bulbosa*) and some as recently as 2018. A spring survey is recommended to verify the *Trifolium*s

Annual survey and monitoring programmes to be introduced.

Archaeology

To conserve and enhance all monuments on site according to SAM criteria and recommendations made in forthcoming report People of the Heath Project, even though all may not be scheduled.

Recreation & Amenity

To encourage & provide for public enjoyment and recreation to include interpretation, an annual programme of self-guided walks, training and volunteering, fishing, boating, cricket and picnic areas.

To maintain & develop the 'partition' of the lake into a wildlife area and an area for recreation.

To encourage active participation of local people in the sustainable management of the site.

To encourage positive use of the site as an environmental and historical education resource

Services

Information & Interpretation

To make a clear distinction between information and interpretation with a view to minimising the signage on site.

All signage to be agreed by the Steering Group

The Steering Group to consider digital interpretation systems where possible such as QR codes to minimise on site signage

Information regarding forthcoming activity/work at the site to be displayed on site and in the local press at least 2 weeks prior to commencement

Visitors to be encouraged to use the whole site for sustainable recreation

Health & Safety

To ensure the work of council employees, contractors and volunteers complies with Health and Safety legislation, COSHH and other legislation and guidance notes.

Cessation of sale of duck food from the cafe to ensure water quality, limit the risk of disease such as Weil's Disease and Campylobacter and reduce waterfowl numbers.

To provide external hand washing facilities to promote good hygiene practise

Management & Communication

Appointment of a Steering Group comprising 2 representatives from each stakeholder group.

Appointment of a Countryside Officer to oversee the practical habitat management of all 13 sites around Petersfield to be supported/managed by PTC and a partner organisation such as SDNPA/H&IOWWT.

An annual work programme to be agreed by the Steering Group.

Collation, digitising and dissemination of all site information.

All work on site to be carried out for sound conservation, archaeological or amenity reasons following reference to the management plan rather than cost or timing issues wherever practically possible.

3.3 FACTORS INFLUENCING MANAGEMENT FOR CONSERVATION/ ARCHAEOLOGY/ RECREATION

Natural Trends

The main trend is for seral succession from rankness through scrub to woodland and eventually complete woodland cover with a consequent loss of heath/grassland habitats and associated species. Dense vegetation cover of barrows may cause root damage and damage from burrowing animals to important archaeology. With a loss of both wildlife and archaeological value the quality of the visitor experience to the Heath would inevitably be diminished.

Human Induced Trends

High visitor numbers and fragmentation of habitats have led to some disturbance of wildlife and archaeology on site. To minimise this, the needs of recreation, conservation and archaeology must be balanced. To this end the Steering Group should consider a number of changes to management practise and ensure the sustainability of the site for future generations.

Littering is a potential danger to people and wildlife. The type of litter, the location and number of bins should be reviewed and individual responsibility encouraged. Removal of bins from site, with the exception of dog bins, should be considered and only dogs on leads allowed on site between March and July. This will reduce management costs and benefit wildlife, especially ground nesting birds. Rough sleeping also seems to be an increasing problem as does other types of anti-social behaviour, such as drug taking. The design and layout of areas should consider this and a daily presence on site encouraged with the appointment of a Countryside Officer and volunteer rangers.

A fall in water levels at the lake has probably been the result of a number of factors. It must be remembered that the lake was originally dug as a shallow bowl. Excessive recreation, high numbers of waterfowl and natural wind action has likely led to an erosion of the banks which together with leaf fall and runoff has led to some build-up of silt. Work to dredge the lake and restore the banks had already begun prior to the publication of this plan.

Feeding of waterfowl has caused an artificial increase in numbers also creating a health and safety issue, a likely reduction in water quality and increased competition for food, to the detriment of native wildlife. This practise should therefore be reviewed by the Steering Group. Construction of swims on the north and west sides of the lake only will reduce disturbance to wildlife and enable the watering of stock in the east, should grazing be reintroduced.

Currently, cutting is used as the main management tool for the grasslands however, it is critical that all arisings are cleared off site to avoid an increase in soil fertility and a subsequent reduction in habitat quality and associated wildlife value. If grazing is re-introduced to the heath, overgrazing and excessive poaching could be a problem. Use of appropriate stock at a low stocking density will be essential. Any practical habitat management must avoid damage to archaeology and maximise opportunities for sustainable recreation.

External Factors

To minimise the ecological isolation of Petersfield Heath, any development near this site should ensure the survival and creation of wildlife corridors. Together with habitat management prescriptions linking fragmented habitats on site, this approach will ensure its wider connection to other local wildlife sites thus strengthening the link between the whole town and the wider countryside, a key aim of the Neighbourhood Plan 2013-28.

Legal & other obligations

Petersfield Heath is designated Open Access Land, a Public Open Space and a SINC. As such it is part of a national network of locally valued sites for wildlife as well as an important area for recreation. Although the SINC designation offers some protection, it should be noted this is a non-statutory designation.

The Heath also contains 21 Scheduled Ancient Monuments illustrating the national importance of the early Bronze Age barrows found there. This designation means that the landowner must apply for written permission from the Secretary of State for Digital, Culture, Media and Sport prior to any work that may affect the monuments. It is therefore advised that Petersfield Town Council apply for any necessary permissions for work proposed in this plan at the earliest opportunity.

Good relations with all users, including those living nearby who do not visit the site, are essential. All parties need to be aware of the reasons for and details of any proposed work on site, so that all parties can work together for the benefit of people, wildlife and archaeology.

Legal constraints can be broadly subdivided into four categories, health and safety, species and archaeological protection, landowner responsibilities and access obligations.

The following list is by no means exhaustive and should be regularly reviewed and updated, especially with regard potential changes in legislation following the UK's exit from the EU.

TABLE 2 - Legal Obligations and Policies

Species Protection	Landowner responsibilities
Protection of Badgers Act 1992	Occupiers Liability Acts 1957 & 1984
Countryside & Rights of Way Act 2000	Petersfield Heath Trust Policy
Conservation (Natural Habitat &c) regulations 1997	Petersfield Town Council Policy
Environment Act 1995	Obligations as stated in leasehold agreements to fishing club, Plump Duck café & boats & The Little School.
Wildlife & Countryside Act 1981	Access
Sites of Importance for Nature Conservation	Disability Discrimination Act 1995
Scheduled Ancient Monuments	Boundaries
Health & Safety	Public Rights of Way
Control of Substances Hazardous to Health (COSHH)	Open Access Land
Health & Safety at Work Act 1974	Public Open Space
Management of Health & Safety at Work Regulations 1999	

3.4 OPERATIONAL OBJECTIVES AND MANAGEMENT OPTIONS

Rationale for Management of the Site

The overall aim of this site is to provide a facility which makes an invaluable contribution to wildlife conservation, archaeology and recreation in the local area.

In managing this site therefore, PTC's primary aim must be to enhance and maintain these features at a favourable status for the benefit of local people.

The western half of the site has long been considered more suited to the recreational aims and responsibilities of PTC, with the lake and café providing a focal point for local people and visitors from further afield. However, in this area there may be an opportunity to improve the sustainability of the visitor experience by restoring and enhancing the surrounding habitat for wildlife through practical habitat management and education about the Heath as a whole. Some prescriptions have therefore been suggested to achieve this. Conservation and archaeological aims have largely taken priority in the eastern part of the site and indeed this area is less frequented by visitors. To address this, a self-guided archaeological walk has been proposed by the museum and approved by the Grounds Committee at PTC. Before this is installed however, consideration should be given to the aims of the site as a whole so that any interpretation that is installed covers all the points of interest of the Heath rather than just a single aspect. This will ensure that any necessary signs are kept to a minimum and that the conservation value of the site can also be appreciated by the visitor.

A large number of volunteers have taken part in practical habitat management and archaeological projects on the site and there is an opportunity to involve local schools and colleges. As an educational resource the Heath offers great potential for children, young people and other visitors to learn both about the environment and archaeology. It provides opportunities for practical involvement in management tasks, as well as surveying and monitoring from interested local groups such as The Friends of Petersfield Heath; The Petersfield Society; the Petersfield Museum; schools and individual members of the community.

TABLE 3 - Outline Objectives and Management Prescriptions

FEATURE	MANAGEMENT OPTION	OUTLINE PRESCRIPTION
CONSERVATION		
HEATHLAND	Active management	Volunteers remove saplings by hand, manage scrub to halt fragmentation, open up areas for heather colonisation. Rotational bracken/gorse clearance to consider birds, invertebrates & reptiles. Protect sensitive areas from stock/dog/visitor trampling.
	Survey/monitor	Annual assessment of heathland management by CO & Steering Group following volunteer survey/monitor.
ACID GRASSLAND (Wet & Dry)	Active management	Volunteers to hand remove saplings. Cut/clear paths/amenity areas as necessary through the summer. Cut/clear areas for conservation/archaeology in rotation. Steering group to look at uses for cuttings.
	Survey/monitor	Annual assessment of grassland management by CO & Steering Group following volunteer survey/monitoring. Look for Trifolium glomeratum & Crassula tilia along footpath below nursery school.
WOODLAND & SCRUB	Active management	Leave standing dead wood for bats/stag beetle/other invertebrates. Remove exotic species. Coppice gorse on a 10-15year rotation/willow at 5 years. Remove saplings from glades/rides & scallop edges. Cut/clear bracken/brambles & scallop edge of woodland blocks in rotation, consider reptiles, birds invertebrates. Rotational thinning/coppicing/layering of understorey to promote variable age structure/shrub layer/views
	Survey/monitor	Annual assessment of woodland management by CO & Steering Group following volunteer survey/monitor.
DRAINAGE DITCHES	Active management	Leave uncut 2m strip on ditch edge. Remove saplings. CO to talk to archaeologists re possibility of cutting back banks to create shallows/marshy areas for flora.
	Survey/monitor	Survey & monitor banks for notable flora
HEATH POND	Active management	Maintain/promote 'partition' between wildlife & recreational area. Review pond restoration to remove silt, restore banks & create islands. Continue willow coppice cycle. Cut 5 coups in annual rotation. Leave 2m margin uncut on east

		bank. Cease sale of duck feed to limit waterfowl & rat populations.
	Survey/monitor	Water levels/ quality. Annual assessment of management by CO & Steering Group following volunteer survey/monitoring.
BIRDS	Survey/monitor	Annual bird survey by CO/volunteers/schools.
BUTTERFLIES	Survey/monitor	Annual butterfly transect by CO/volunteers/schools.
INVERTEBRATES	Survey/monitor	Annual invertebrate survey by CO/volunteers/schools- beetles/dragon/damselflies/solitary bees/wasps
BATS	Survey/monitor	CO to work with volunteers on annual bat survey.
REPTILES	Survey/monitor	CO/volunteers to monitor reptile management
BADGERS	Survey/monitor	CO/volunteers to continue to monitor badgers.
ARCHAEOLOGY	Active management	Report now being prepared by George Anelay, West Sussex Archaeology following People of the Heath Project 2014-18. To include removal of saplings, bracken & scrub from barrow mounds. Barrows to be excluded from any grazing areas.
	Survey/monitor	CO/volunteers to annually monitor mature trees on barrows/regrowth/erosion from trampling. Management success to be assessed by CO/steering group after consideration of expert/volunteer monitoring & survey work.
AMENITY		
BOATING	Monitor	CO & Steering Group to monitor effects of increased boat numbers on wildlife. Consider Health & Safety implications of increased number of islands
ANGLING	Monitor	PTC to regulate & monitor
	Active management	PTC & Petersfield Angling Association to liaise PTC/PAA to consider natural regeneration v stocking.
CRICKET	Survey/Monitor	Volunteers to survey & monitor Chamaemaelum nobile on pitch.
	Active management	PCC to adjust pitch management where necessary to ensure growth of Chamaemaelum nobile. PTC/volunteers to coppice/prune/crown lift encroaching trees & scrub as necessary. No alien planting on Heath, including in front of pavilion. Any planting to have permission of CO & Steering Group.
ACCESS	Active management	To maintain/promote open access to the whole site wherever no conflict with archaeology/conservation or amenity objectives, except Plump Duck/playground/school/pavilion/cricket pitch. To

		promote disabled access. Steering Group consider limiting dog access to east side of site during nesting season i.e. dogs must be on lead between March & July.
INTERPRETATION	Active management	To take coordinated/timely approach to interpretation on archaeology/wildlife/amenity value of site. Ensure signs updated/visible in spring/summer

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4. PRESCRIPTIONS

In this section various management options are discussed in detail and where possible specific prescriptions suggested. For this purpose, the site is divided into four compartments (**MAP 3**), as discussed in Zones and Compartments - Section 1 of this plan - which largely relate to the habitat types described in Habitats/Communities in Section 2. All work on site should be preceded by effective publicity to promote understanding of any proposed work and limit conflict between stakeholders.

4.1 COMPARTMENT PRINCIPLES & PRESCRIPTIONS

Compartment 1 – Heath Pond & Amenity Grassland [**MAP 3**]

The main aim for this compartment is to promote sustainable recreation, whilst improving the wildlife value of the pond, its marginal vegetation and the surrounding grassland and woodland. This can be achieved with an approach to management which considers the aims and objectives of the site as a whole.

In the 10 year Management & Restoration Plan for Petersfield Heath, prepared by the NE Hants Heathland Project for a Countryside Stewardship application in April 1993 (**APPENDIX 8**), the grassland to the north of the pond and east of the café, in Compartment 1 of this plan (**MAP 3**), was described as ‘species rich acid grassland and one of the most ecologically valuable areas of the Heath’. It recommended that, as the trampling of visitors benefits the less vigorous herbs growing there, grass cutting should continue as required with the essential removal of all arisings to further deplete the soil nutrients. It goes onto say, ‘there is good potential for an even richer sward’ further stating, ‘Tree planting or construction of any kind should be avoided in this area if at all possible.’

However, the Management Assessment Report prepared by Hampshire County Council in August 1993 (**APPENDIX 5**), did not fully recognise the conservation value of this compartment and stated that, with the exception of the west side of the site, the priority should be to conserve the natural character and habitats of the site. This is largely how the site has developed over the past 25 years.

In this plan, Compartment 1 has the same boundaries as in 1993. The 3 key aims of site management - recreation, conservation and archaeology - have now been given equal weight, so any prescriptions relating to Compartment 1 should also consider these key aims for the whole site,.

Petersfield Town Council awarded a contract in spring 2019 to dredge Heath Pond and stabilise the banks as a result of increasing concern over low water levels and bankside erosion. This includes partitioning parts of the pond into areas for wildlife and areas for recreation where angling and boating can take place, formalising and extending existing practice. The contract includes the rebuilding of banks and the construction of two more islands using the dredged silt.

To ensure that the aims of the site as a whole are achieved, any public recreation on site, including at Heath Pond, must be sustainable. To ensure the aims and objectives of this compartment, the site as a whole and the wider environment of the town and surrounding area are met we must consider the original design and purpose of the pond (**APPENDIX 9**

P.18 2007 Pond Siltation Survey), the needs of protected species found at this site (**APPENDIX 3** *Phlorum surveys*) and any wider environmental concerns, as well as recreation and amenity.

Heath Pond was originally constructed as a shallow pond to facilitate the watering of cattle in the 18th century. Although deeper water might benefit angling and boating, it could have been of greater benefit to the site and more sustainable to adapt these activities to the existing profile rather than change the ecological status of the pond and its surrounding to promote them. (**APPENDIX 9**)

Artificially high numbers of waterfowl and fish stocks; the consequent reduction in vegetation cover; and increased bankside erosion can result in an increase in competition for food and habitat, leading to a fall in invertebrate populations and this may have happened at Heath Pond over recent years. This in turn may threaten the survival of wildlife, in particular a number of the site's protected species including bats and reptiles. Some of the details of the dredging contract were first suggested more than 25 years ago, since when the wildlife value of this compartment has declined. Although intended to reflect the 3 key aims, the works could unintentionally compromise wildlife and the natural environment. In future, it is essential that the pond is considered as part of the whole site and that any works sustain and increase wildlife value.

Some points for consideration by the Steering Group and the Countryside Officer are set out below.

Pond dredging.

It is recommended that wider issues such as carbon release; cost; needs of protected species across the site; and the overall aims and objectives of this compartment and the site as a whole, should be carefully evaluated before dredging work is considered in future.

Use of plants native to site

Any marginal planting of banks and islands should refer to the recommendations of the 1993 Management Assessment Report and vegetation surveys of 1993, 2004, 2018 to ensure plants native to the site are used.

Minimising fragmentation and conflict between site users

The pond contract increases the number of swims, enabling anglers to fish from points around most of the pond. Together with the recent increase in the number of boats, this will increase disturbance and lead to further fragmentation of those areas designated for wildlife.

By restricting swims to the north and west sides of the pond only, the eastern side could provide a good opportunity for wildlife and livestock to access the pond with minimal disturbance. Boaters could use the more central areas of the pond which are of limited wildlife value and would not disturb anglers.

Maximising benefits to wildlife and promotion of sustainable recreation

Although fishing and feeding the ducks are popular pastimes, encouraging natural regeneration of fish stocks and preventing future grain sales would improve water quality; reduce competition for food and habitat; and increase invertebrate numbers, potentially benefiting associated wildlife such as bats and reptiles on the rest of the site. Health and safety risks to visitors will be minimised through greater control of vermin and waterfowl numbers.

Removal of all exotic species from this compartment, including the *Rhododendron ponticum* in the woodland to the south west of the pond will also enhance the connection of the town with the wider countryside.

The grassland in the north west of this compartment may have once contained some of the most notable plant species for the site - *Poa bulbosa* and rare clovers such as *Crassula tillaea* (Mossy stonecrop) were recorded in 1993.

A further survey of this grassland area should be commissioned to establish if these notable plant species are still present and to help inform appropriate management in the future.

This compartment is the location for a large number of memorial benches and it is suggested that the Steering Group/PTC Grounds Committee consider whether Petersfield Heath remains a suitable site for this. PTC Grounds Committee should consider alternative sites, better suited to this use in the future.

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TABLE 4 Management prescriptions for Compartment 1 Heath Pond & Amenity Area (**MAP 3**)

Objective	Prescription	Year				
		1	2	3	4	5
Promote understanding of wider aims & objectives of site.	Angling Association/Plump Duck to be represented on Steering Group to meet twice a year.	*				
Steering Group to review outstanding contract work for pond restoration with regard to overall aims of compartment, site & wider environmental issues.	Steering group to be satisfied any future dredging & associated work at the pond, meets all aims & objectives of site including conservation.	*				
	Steering Group to review proposed areas in north east & north west corners of pond, to minimising habitat fragmentation & disturbance to wildlife whilst promoting fishing & boating.	*				
	Steering group to consider locating swims to north & west banks of pond only, to promote sustainable recreation & maximise benefit to wildlife in eastern part of site.	*				
Maintain & enhance existing partitioned areas of pond.	PTC/FoPH to maintain existing wildlife area in south east corner by removal of saplings from reedbeds on 4yr rotation as necessary.	*				*
	Reeds to be cut & cleared on a 5-10yr rotation as necessary.		*			
	Replacement of fencing in November to January.	*				
Bank Restoration	Where banks to be reconstructed/planted use only materials suited to heathland sites & plant species native to the site. Reference to be made to Dr Francis Rose's 1993 survey, 2004 & 2018 survey, especially recommendations for compartments 1 & 2 (APPENDIX 10 1993 HBIC survey & recommendations of Dr Francis Rose) & any other old botanical records for the site before planting plan agreed.	*	*	*		
	Steering Group to ensure only plants native to site used in any marginal planting	*				
	PTC/FoPH to remove all exotic plant species & monitor regrowth.	*	*	*	*	*
	Continue coppicing 50% Willow on 5yr coppice cycle to reduce leaf litter. Divide area into 5 coups, 1 coup only to be cut each year. Avoid cutting adjacent coups in	*	*	*	*	*

	consecutive years. Use volunteers where possible.					
	Volunteers to construct log piles close to pond where appropriate. Approx. 1m high, long side facing south to provide hibernation sites for amphibians & support invertebrate populations.	*	*	*	*	*
	Allow 50% of native bankside trees to grow to full maturity.	*	*	*	*	*
	PTC/FoPH to remove all exotic species & monitor regrowth. Crown lift/coppice as per woodland compartments to encourage structural & age diversity	*	*	*	*	*
Maintain & enhance woodland	PTC to mow amenity areas as necessary. All arisings must be removed.	*	*	*	*	*
Maintain & enhance grassland	No mowing within 2m of banks to provide habitat for amphibians.	*	*	*	*	*
	Grassland within 2m of the boundary hedge along Sussex Rd to be divided into 100m sections. One section to be cut & cleared in Nov to provide ecotone & encourage reptiles.	*	*	*	*	*
	PTC to allow standards to grow every 100m in boundary hedge to protect bats and other wildlife from street lighting. Hedge to be trimmed in Feb in 'A' shape.	*	*	*	*	*
Maintain & enhance boundary hedge	PTC/Schools/Volunteers to monitor water quality & share data with Ranger/Steering Group.	*	*	*	*	*
Health and Safety	PTC to monitor & control rodent population where necessary. To educate public of problem and H&S issue.	*	*	*	*	*
	PTC to provide outdoor hand washing facility.	*				
	Phase out sale of bird feed due to H&S issues & disadvantages to wildlife & water quality	*				
Improve water quality	Silt traps to be fitted on all inlet pipes if not in place & regularly checked & cleared.	*	*	*	*	*
	PTC to encourage Angling Association to adopt natural regeneration programme rather than restocking to improve water quality & encourage wildlife.	*				
	PTC/CO/Steering Group to promote sustainable use of pond & monitor success of fishing/boating lease with regard all site aims.	*	*	*	*	*

Sustainable recreation	PTC/CO/Plump Duck/volunteers to promote responsible dog ownership around pond, control of craft, water sports	*	*	*	*	*
	Steering group to distinguish between information & interpretation, to rationalise site signs accordingly & maximise benefit for all 3 key site aims on any interpretation/information necessary.	*	*	*	*	*
	Steering group to consider siting 'What to look for on Heath' chalk board near café, to be updated weekly by volunteers.	*				
	Notices of planned management to be displayed on site/website/press at least 2 weeks prior to start.	*	*	*	*	*
	CO/FoPH to provide volunteer opportunities for practical habitat management, surveying & monitoring at the pond	*	*	*	*	*
	CO/FoPH/schools to survey/monitor grassland in north west in spring/summer, especially for rare plants recorded in earlier surveys. Management to be adjusted according to findings.	*	*	*	*	*
Survey & monitor	CO to encourage volunteers/schools to survey/monitor birdlife, especially in winter & other wildlife eg. amphibians around pond.	*	*	*	*	*
	FoPH to monitor water quality & continue to monitor water levels. To share findings with Steering Group.	*	*	*	*	*
	FoPH/schools/Angling Association to survey marginal vegetation	*	*	*	*	*
	Angling Association to survey & monitor fish stocks with a view to allowing natural regeneration of stocks.	*	*	*	*	*

Management Compartment 2 – Heathland & Acid Grassland [MAP 3]

This compartment has a large area of remnant heathland containing species typical of both wet and dry lowland heath and acid grassland, with a matrix of scrub vegetation including gorse, bracken and bramble.

There is a small copse on a sandy knoll in the north west of the compartment consisting of birch, rowan, oak, bracken, bramble and gorse, which slopes south into a restored area of heathland. The short grassland in the north west of this compartment (**MAP 7**), adjacent to Compartment 1, was described in the 1993 Restoration Plan as ‘once the richest part of the whole site’. Unfortunately, this area was temporarily used to dump dredged silt and then sown with rye grass in the 1980’s. This resulted in the disappearance of some of the rarer species. Today it is managed as part as amenity grassland however, there has been some recovery in this area and in the 2018 HBIC survey, more unusual plants such as *Poa Bulbosa* and *Ornithopus perpusillus* were recorded.

The key management objective in this compartment is to maintain and enhance these habitats, which are of regional and national importance, in a favourable conservation status whilst at the same time preserving the important archaeology and enhancing the visitor experience at the site. The trend over most of this compartment towards rank, coarse vegetation of less botanical interest was slowed when the golf course closed in 1997. Since then, there have been two HBIC surveys, 2004 & 2018, which have shown an overall improvement of the site, with an increase in area of Priority Habitat lowland heathland and lowland dry acid grassland. This is thought to be, largely, due to the cessation of fertiliser application.

To maintain this area of remnant heath and acid grassland together with its structural diversity, some form of management is required to prevent natural succession to scrub and finally, woodland. There are three main ways to manage heathland - by grazing; cutting; or burning; or a combination of these methods. Each method has its own advantages and disadvantages.

Cutting will prevent succession, create structural diversity and fire breaks but also, risks injury to reptiles both directly and indirectly, through short term habitat loss and loss of key elements within it, such as tussocky grass or vegetation age structure. Where reptiles are most likely present, (**MAP 14 Phlorum Reptile survey map**) at Petersfield, cutting of small areas of grassland should be carried out in cycle, between November and January, no more frequently than every three years to prevent succession to scrub. Bracken and bramble can provide essential wildlife habitat and any areas to be controlled are best cut repeatedly in cycle, in small areas, in June or July to prevent injury to reptiles and destruction of useful wildlife habitat. The cycle for cutting heather is much longer, 25 to 30 years and with gorse the cycle should be 15 years. This ensures that there is always suitable habitat available to reptiles and other heathland species by creating both structural and species diversity.

The success of grazing can vary considerable on different sites but also, on different areas within a site. Benefits of grazing include prevention of succession, creation of structural diversity, new partnerships, long term financial savings and engagement with volunteers and the wider community in the project and the site. However, there are some disadvantages which should be seriously considered. Dry heath can be very sensitive and

easily damaged through overgrazing. Stock type is important and density must generally be low for conservation grazing (0.2 cows per hectare) but even this may prove unsuitable where there are reptiles on a site or there is an archaeological interest, as at Petersfield Heath. Each area grazed must be carefully monitored and controlled, to avoid both habitat damage and any consequent decline of key wildlife species. It is understood that the Grounds Committee are currently looking at the possibility of grazing at Petersfield Heath in partnership with other organisations.

Grazing occurred on this site up to about the 1920's and it has been used successfully as a management tool on sites where public recreation is now an important aim. Special consideration will need to be given to the effects of grazing on the important archaeology of this site & any protection measures required. Other considerations at Petersfield include effects on ground nesting birds, reptiles & other wildlife, availability & type of stock, stocking density, availability of water, holding areas, fencing, public perception, dogs, husbandry including volunteer help, vehicular access and timing. Wide publicity and consultation should be undertaken before such a project is implemented to ensure full public support.

Burning is more usually used on moorland sites but, increasingly used on heathland to maintain structural diversity. It is rarely recommended on sites where reptiles are present as the risks are too high although, steps can be taken to minimise these by timing any burn between November and January when reptiles are usually hibernating. The burn areas should be as small as possible and particular areas where reptiles are known to frequent, should be excluded. Burning is not recommended for small sites as it presents too big a risk to small and often, isolated reptile populations. It can take up to 20 years for a site to recover from a burn.

The Petersfield Heath fire of 2018 destroyed quite a large area of heathland habitat and the remaining areas are small and fragmented and dominated by coarse grasses. Currently, approximately 20% of terrestrial habitat on site is 'good or optimal habitat for reptiles.' (**APPENDIX 3** *Phlorum Reptile Survey Petersfield Heath January 2019*). Improving the heathland habitat by creating a mosaic of structural diversity through the control of the coarser grasses and restricting encroachment of scrub, will not only benefit reptiles but also, invertebrates and other wildlife. The Phlorum Reptile Survey 2019 suggests that a further 3 hectares of heathland could be restored with appropriate management.

The popularity of this site for public recreation represents a significant problems obstacle to both grazing & burning management options; however, they are still worth exploring and the Countryside Officer and Steering Group should therefore consider them with expert advice from organisations such as SDNPA, ARC and H&IOWWT.

PTC & FoPH have managed this site through a programme of cutting for a number of years. Although there has been some confusion over the different requirements for each of the many compartments described in past plans, I have written the following management prescriptions for a cutting regime. This is because it is the existing management tool and likely to continue to be so for some time. The arisings are rarely removed due to problems of cost and lack of disposal methods and since removal of this material plays a critical part in the successful management of heathland and grassland sites, this issue needs to be urgently addressed. Ideally, cuttings should be completely removed from site and any management

costs must take this into account. Options that the Countryside Officer and Steering Group could investigate, include the following.

Removal to a more suitable part of the site where nutrient leaching would not be such a problem e.g. the carpark.

Partnering other council departments such as waste & adding them to green waste for sale as compost.

Partnering other organisations such as garden centres/Open Gardens or the Petersfield Physic Garden for sale as acid mulch or adding to other mulch mixes. (N.B. RHS Wisley is currently adding acid mulch to areas to restore the original acid soil properties of the site).

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TABLE 5 Management Prescriptions for Compartment 2 – Heathland and Acid Grassland

Objectives of Compartment 2 Heathland & Acid Grassland	Prescriptions	Priority/Year				
		1	2	3	4	5
Sustainable Recreation Develop & enhance understanding of wider aims & objectives of site	Provide 2 places for each stakeholder on the Steering Group to meet twice a year. CO to consider appropriate training for Steering Group members & other interested groups/people.	*	*	*	*	*
Conserve barrows & create views between them in consultation with archaeologists, George Anelay & Stuart Needham (Plan currently being drawn up 2020)	Remove all saplings < 30cm at chest height from barrows & immediate surroundings (10m)	*	*	*	*	*
	Ranger and archaeologists to annually monitor the health of all mature trees left on barrows, with removal only taking place where no other option available to preserve the barrow.	*	*	*	*	*
	Once clear of young trees, PTC/FoPH, in consultation with archaeologists, to cut & remove scrub from all barrows & immediate surround (10m), to minimise disturbance from burrowing animals. Regrowth to be monitored.	*	*	*	*	*
	Bracken on & within 10m of all barrows to be cut/sprayed in June/July to Mid Aug to minimise disturbance to reptiles. NB Cutting to occur at least 2 x py. Ranger/archaeologist to identify suitable stands in remaining areas of compartment as below, to be left or cut on longer cycle to ensure wildlife cover. Regrowth to be monitored by Ranger.	*	*	*	*	*
	Where barrows & immediate surround have an established grass sward, (see barrow 11 for good example) Countryside Officer/FoPH, in consultation with archaeologist, to cut to a minimum height of 15cm & remove arisings, by hand, on 3year rotation, (ie. 2/3 barrows to be brush cut each year. Work to be carried out between Nov & January for minimum disturbance to reptiles. Barrows to be monitored by archaeologists. Habitat & key species to be monitored by Countryside Officer/FoPH. Management to be adjusted accordingly.	*	*	*	*	*
Encourage protected species/species diversity/age	Countryside Officer/Steering Group to consider merits of cutting versus grazing for Petersfield Heath or a mixed system in consultation with SDNPA, archaeologists, ARC.	*				

range throughout heathland/acid grassland.	For cutting, Countryside Officer to divide grassland only into small areas as described below (<i>See APPENDIX 6 & MAP 5 2018 HBIC survey for current NVC Communities, MAP 4 1993 compartments & 1993 restoration plan, MAP 14 reptile survey map, MAP 2 Barrow cemetery,</i>) within the compartment to promote suitable management regimes & avoid damage to archaeology, heathland & injury to reptiles & associated habitats.	*	*	*	*	*
	Use some grass cuttings to make habitat piles on site for grass snake egg laying sites. NB. Restrict to small number of areas where nutrient leaching minimal. Monitor use. https://www.arc-trust.org/Handlers/Download.ashx?IDMF=e32fe83a-fd68-4046-80b4-445708346803	*	*	*	*	*
	Leave longer areas of vegetation around hibernation sites to provide cover for reptiles i.e south facing slopes/scrub/log piles.	*	*	*	*	*
	Create ecotones between habitats by encouraging transitional vegetation of differing height/structure to develop between plant communities e.g. bracken at the edge of wood, grassland at the edge of heathland.	*	*	*	*	*
	FoPH to create south facing log piles and create artificial refugia for reptile/amphibian habitat (NB. Could be done instead of dead hedging but, limit number)	*	*	*	*	*
Minimise fragmentation of grassland or heathland	Countryside Officer to identify any areas for scrub clearance to reduce fragmentation of wet acid grassland especially in the area to the north of the outlet channel. (MAP 3 <i>Compartment 2</i>)	*	*	*	*	*
Maintain & enhance acid grassland	Short dry acid grassland areas in north, west, central & eastern areas of compartment (<i>Map 5 areas classified U1B</i>) to be cut & cleared in July to maintain short sward for spring flowering herbs. These areas to be surveyed & monitored annually in spring for regrowth and presence of reptiles. Management to be adjusted accordingly.	*	*	*	*	*
	Under guidance of Countryside Officer wet acid grassland areas (MAP 5 , <i>NVC Communities, M25a, M25b & M23b</i>) to be cut & cleared by hand (brush cutter) on a 3-5yr rotation between Nov & Jan, at a height of no less than 15cm where reptiles present. The wetter parts of this area may benefit most from light grazing however, archaeology & presence of reptiles must be considered in any management (MAP 14 <i>Phlorum Reptile Survey</i>). Adjacent areas	*	*	*	*	*

	should not be cut in same yr, cutting on sunny days near hibernation sites should be avoided as reptiles may bask. Any heather to be left uncut as below.					
	Grassland on the old fairway, in the west of the compartment with more vigorous, rank species (MAP 5 NVC Communities MG1, MG6) to be cut & removed in July (if no reptiles present) and Nov, on an annual basis to deplete soil nutrients.	*	*	*	*	*
Maintain & enhance heathland	Countryside Officer to protect where necessary, more established areas of dry and wet heath from cutting/trampling. (MAP 5 NVC Communities H1a, H2, H2c dry heath, M25a, M25b & M23b wet heath). Any heather cutting cycle should be on a 25-30 yr cycle and only introduced when heather established.	*	*	*	*	*
Gorse management	Gorse to be included in 15yr management cycle for whole site. Where gorse is old, cut only 1/3 stems from any one shrub in same year to ensure regrowth.	*	*	*	*	*
Bracken & Bramble control	Countryside Officer/Steering Group to consider the merits of cutting/rolling versus spraying to control bracken on site with consideration for key species. https://www.arc-trust.org/Handlers/Download.ashx?IDMF=e32fe83a-fd68-4046-80b4-445708346803	*				
	Countryside Officer/volunteers to survey & monitor location, size & aspect of bracken stands	*	*	*	*	*
	CO to divide bramble stands into small areas within the compartment to be left or cut by hand in late June/July or sprayed July – mid Aug	*				
	CO to first target areas where succession biggest threat	*				
	CO to ensure small scattered stands left uncut, especially close to hibernation sites.	*	*	*	*	*
Removal of exotic/non-native species	Survey and remove, where possible, all non-native species on site. Work to be carried out between Sept & March to minimise disturbance to wildlife.	*	*	*	*	*
Path clearance	Strim paths throughout compartment twice a year in early spring/summer. N.B. Some evidence to show minimal risk to reptiles in very hot weather.	*	*	*	*	*
Sustainable recreation	CO to encourage year-round volunteer involvement with the management of the site including FoPH, schools, archaeology groups, local community groups. To include practical habitat management, surveying & monitoring eg. Butterfly transects, walks & talks & stock management should grazing go ahead.	*	*	*	*	*

	CO & Steering Group to consider if dogs to be kept on lead during nesting season i.e March-July		*				
	Conservation and archaeology to be given equal attention on self-guided walk signage to be installed	*					
	CO to run a programme of guided walks using local expertise through the summer months	*	*	*	*	*	*
	Steering Group to distinguish between information & interpretation, to rationalise site signs accordingly & maximise benefit for all 3 key site aims in any interpretation material.	*					
Survey & monitor	Annual survey/monitoring of grassland/heathland areas by competent ecologist to establish success of management of heathland/acid grassland. Should be maintained in favourable conservation status.	*	*	*	*	*	*
	CO to train volunteers in simple survey & monitoring techniques such as fixed-point photography & butterfly transects to be carried out annually.	*	*	*	*	*	*
	CO to collate Aerial photographs to monitor extent of habitats.	*		*			*
	Volunteers to monitor spread of Heather Beetle and Gorse Spider Mite	*	*	*	*	*	*
	All records to be submitted to CO to be put on PTC & HBIC database.	*	*	*	*	*	*

Management Compartment 3 – Woodland [MAP 3]

Petersfield Heath contains a matrix of secondary woodland, some of which is planted, probably in the late 1800's, although most of it is likely to be the result of natural succession over former heathland or grassland. Since 2004 however, according to the HBIC survey of 2018, there has been little change in the overall distribution of the woodland. *Quercus robur* (English Oak) is the major tree species throughout the site, accompanied by *Sorbus aucuparia* (Mountain Ash), *Betula pendula* (Silver birch), *Ilex aquifolium* (Holly) and *Pinus nigra* (Scots pine). The shrub layer is poorly developed and varies in density. It is dominated by *Rubus fruticosus* (Bramble) and *Pteridium aquilinum* (Bracken) with *Ulex europaeus* (Common Gorse) and some significant stands of *Ilex aquifolium* (Holly). The ground flora is also species poor and, in some places, completely absent (**MAP 5 NVC communities**). Some mosses are frequent, and grasses and ivy are sparse.

The objectives of woodland management at Petersfield Heath are to improve structural and species diversity, as well as the age range of individual trees and prevent the invasion of scrub and ultimately woodland onto adjacent heath and grassland areas. An annual programme of coppicing, layering, halo release, thinning, crown lifting and the scalloping of rides, glades and edges will help achieve these objectives. Opening up key views through the wood, between barrows and across the site to the wider countryside, will also provide added benefits for recreation, improving the visitor experience and security.

The recent archaeology project 'People of the Heath' highlighted the national importance of the Bronze Age monuments on the site and these must be protected from disturbance as in Compartment 2. This means keeping the barrows clear of trees and scrub and maintaining a short sward, as far as possible. This management will deter burrowing animals and minimise damage from roots. Mature trees should be retained on barrows and their decline monitored.

Although the woodland itself is not of particularly high conservation value it forms an essential element of the biodiversity of the site as a whole. It provides good habitat for nesting birds, dead wood for invertebrates which in turn are fed on by bats, reptiles and other wildlife found at the Heath. Bracken and bramble growing at the edge of woodland can form very important ecotones between habitats and are often the most valuable areas for wildlife. Small scattered stands of bracken provide a microclimate for reptiles and other wildlife, especially in early spring when it is often warmer than the surrounding landscape. Bramble thickets provide cover for nesting birds in spring, nectar for invertebrates in summer and fruits for all to enjoy in autumn. Control of this valuable habitat should therefore be carefully considered to ensure that it is always available.

Cutting or rolling is more suited to bigger, more dense areas of bracken and best done from late June to late July to minimise any risk to reptiles. Spraying is more suited to smaller, more fragmented areas often at the edge of habitats. However, although spraying may be the most effective method of bracken control, cutting or rolling is less costly. Any control methods used should first consider the important archaeology of the site and the possible effects on visitors and wildlife.

Recently there have been some concerns over anti-social behaviour in the woodland, including rough sleeping and drug taking. By opening up these areas, visibility across the site will be much greater and the woodland will become a more attractive place to walk for

all. The control of Holly, which can be very invasive, is particularly important in this respect. Woodland habitat can be more robust when it comes to visitor pressure and the increased use of these areas will in turn deter anti-social behaviour and reduce disturbance to wildlife in other more sensitive areas of the Heath at important times of the year. Visitor use of the woodland should therefore be encouraged.

TABLE 6 Management prescriptions for compartment 3 – Woodland

Objectives of Compartment 3 Woodland	Prescriptions	Priority/Year				
		1	2	3	4	5
Sustainable Recreation Develop & enhance an understanding of the wider aims and objectives of the site	Provide 2 places for FoPH and 2 for archaeologists, on the Steering Group to meet twice a year. CO to consider appropriate training for Steering group members & other interested groups/people.	*	*	*	*	*
Conserve barrows & create views between them.	CO, in consultation with archaeologist, to create open sward on barrows & views between, by cyclical clearance of saplings <30cm diameter at chest height from barrows & immediate area (10m) with help of PTC/FoPH/other volunteers. Any mature trees to be left and monitored annually.	*	*	*	*	*
	CO/archaeologist to identify individual trees in surrounding canopy to be crown lifted & shrubs to be thinned or coppiced, to increase views between barrows, especially between barrows 11, 13 and 20. Work to be carried out between Sept & March. NB. Work in November will minimise disturbance to reptiles. FoPH/CO to monitor regeneration & clear accordingly.	*	*	*	*	*
	Once clear of young trees, PTC/FoPH to cut & clear sward & remove scrub from all barrows annually if necessary for archaeology, to minimise disturbance from burrowing animals. Work to be carried out between Sept & March. Otherwise 3 year cutting cycle in November will minimise disturbance to reptiles.	*	*	*	*	*
Bracken & Bramble control, to provide small scattered stands, especially close to hibernation sites.	CO to decide on method of bracken control most suited to site. Timing & method is critical to reptiles. Rolling or cutting & clearing maybe carried out up to three times a year from late June to late July, when bracken cover maybe too hot for reptiles. Any regrowth, although less vigorous, should be cut or rolled again. Spraying can be carried out from July through to mid-	*	*	*	*	*

	<p>August, when the fronds are fully open. https://www.arc-trust.org/Handlers/Download.ashx?IDMF=e32fe83a-fd68-4046-80b4-445708346803 CO/archaeologist to identify suitable stands in surrounding area of barrows, to be left for wildlife cover.</p>						
Gorse management	<p>CO to divide areas of gorse into 15 coups across the site. One coup to be cut each yr. in November, to ensure all growth stages are present, maximising wildlife benefit. If shrubs very old cut only 1/3 stems in any one year to encourage regrowth. No cutting of adjacent coups in same year. Aim to create small scattered stands of gorse above south facing slope to be left each year for reptiles.</p>	*	*	*	*	*	
Hedge management	<p>Boundary hedge to be trimmed in Feb. in 'A' shape to provide winter berries for birds & thick hedge for cover. Leave standard trees every 100m to shelter bats & other wildlife from external lighting. Create ecotone at hedge base.</p>	*	*	*	*	*	
Encourage species diversity/age range & shrub/ground layers in woodland with standards.	<p>CO to divide all woodland into small coups according to NVC communities and target notes of HBIC survey 2018 (MAP 5 NVC Communities), to allow selective thinning, halo release, crown lifting & coppicing on a 7 to 15year cycle as below. CO, in consultation with FoPH, to identify trees to be retained & grown on as standards.</p>	*					
	<p>CO to divide W10c Oak woodland (MAP 10) into 7 coups, one coup to be coppiced each year where suitable species identified i.e. Hazel, Ash & Willow. FoPH to follow with layering of new growth where shrub layer needs boosting. NB. Adjacent coups should not be cut in subsequent year, to ensure max wildlife benefit.</p>	*	*	*	*	*	
	<p>CO to divide W16 Oak woodland areas (MAP 10) into 15 coups, one coup to be coppiced each year where suitable species identified (as above). Layering to follow as above. NB. Adjacent coups should not be cut in subsequent year.</p>	*	*	*	*	*	
	<p>Thin Holly by 10% in north of compartment to let light in and create views between barrows 1 & 3</p>	*	*	*	*	*	
	<p>CO to divide W1/W6b Willow woodland areas (MAP 10) into 5 coups, one coup to be coppiced each year. NB. Adjacent coup should not be cut in subsequent year.</p>	*	*	*	*	*	

	Standing dead wood, especially Oak & stumps to be retained wherever health & safety allows to provide bat roosting sites & encourage invertebrate populations.	*	*	*	*	*
Ensure woodland edge, glades & rides managed for maximum wildlife benefit without conflict with archaeology & recreation.	All rides, glades & woodland edges to be monitored to prevent encroachment onto heathland or acid grassland. Woodland edge to be scalloped in 5/10yr rotation wherever possible to maximise reptile habitat. South facing edges to be favoured and ecotones created.	*	*	*	*	*
	CO to reduce the impact of outline golf fairways and fragmentation of grassland/heathland particularly in central and southern areas of the site with limited woodland/scrub clearance over 5 yrs. i.e. No more than 20% of total area to be cleared, to be cut in any one yr. Leave scattered areas of woodland/scrub across the Heath. This will provide protection from fire/habitat loss & open up views through the woodland & scrub. CO to survey & monitor regrowth & adjust management accordingly.	*	*	*	*	*
	Woodland on and around Music Hill & along line of public footpath to the south east of Music Hill to be included in clearance programme, to prevent fragmentation of grassland & create view to south east from Music Hill. South facing edges to be scalloped to provide maximum benefit to reptiles.	*				
	Scallop woodland edges in 5yr rotation, to ensure some areas of thick scrub, including Bracken & Bramble especially where south facing, to provide nesting & hibernation sites, cover & food for reptiles & birds. Woodland edge should not extend into grassland or heathland areas. Begin in year 1 with woodland next to old fairway.	*	*	*	*	*
Sustainable recreation	Volunteer involvement with annual woodland management to be encouraged at every opportunity.	*	*	*	*	*
	Remove litter bins from compartment after much publicity & monitor rubbish.	*	*	*	*	*
	Annual programme of guided walks, talks & training across all PTC sites to be produced by CO.	*	*	*	*	*
Ensure views from site to South Downs & wider countryside & in particular, from Music Hill across site.	CO in consultation with FoPH/archaeologists to identify individual trees in each woodland coup for selective felling, crown lifting and halo release to enhance views and structure of woodland and minimise fragmentation of grassland.	*	*	*	*	*

	Requirements of key species such as bats, badgers, reptiles & invertebrates to take priority.					
Survey & monitor	Encourage local volunteers to continue to survey and monitor the woodlands in particular the success of management on ground flora & woodland structure, the development of ecotones and the effects on bats, badgers, invertebrates etc.	*	*	*	*	*

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Management Compartment 4 – Cricket Pitch [MAP 3]

The aim of this compartment is to facilitate the playing of cricket using an approach that is sympathetic to the important archaeology of the site and also benefits wildlife. This will require the conservation management of the barrows, together with the adjacent woodland and grassland in the immediate vicinity of the pitch. The compartment is adjacent to and includes habitat that supports a number of protected species, such as bats and reptiles and several other notable flora and fauna species have also been recorded here including *Chamaemelum nobile* actually growing on the pitch.

There are six barrows (**MAP 2 Bronze Age Barrow Cemetery**) in and around this compartment which are part of a much larger collection of Scheduled Ancient Monuments across the site and the immediate neighbourhood. The aim of any management must be to minimise disturbance to these barrows by keeping them clear of trees and establishing a short sward to avoid damage by tree roots and burrowing animals. This will also have the advantage of opening up views between the monuments which will enhance the visitor experience.

The cricket pitch itself is currently managed by the cricket club. Notably, *Chamaemelum nobile*, (Roman chamomile) has been recorded, in the past but, was not recorded in the 2018 survey. This does not mean it is not present and a botanical survey should be carried out as soon as possible to establish its status. Existing management of the pitch should be recorded and future management then agreed with the cricket club.

The remainder of the compartment should be managed for archaeology and wildlife wherever possible as the 2018 Phlorum reports established the presence of at least two protected species in this area of the site. These include bats and reptiles. Although no badger sets were found on site it is likely that they travel through this compartment and have been recorded by FoPH. To enhance and develop the wildlife value of this relatively small compartment, a mosaic of habitats with a diverse structure of species and age range should be encouraged wherever possible. Allowing small stands of bramble, bracken and other scrub to form ecotones between the pitch, the grassland and the woodland will be particularly beneficial to wildlife and will provide cover for small mammals, birds and reptiles, as well as food for invertebrates.

TABLE 7 Management prescriptions for compartment 4 – Cricket pitch

Objectives of Compartment 4 Cricket Pitch	Prescriptions	Priority/Year				
		1	2	3	4	5
Sustainable Recreation Develop & enhance an understanding of the wider aims and objectives of the site with the cricket club	Provide 2 places for Cricket Club executives on the Steering Group to meet twice a year. PTC/CO/archaeologists to consider appropriate training for Steering Group members & other interested groups/people.	*	*	*	*	*
	Gradually remove litter bins from compartment after publicity to encourage visitors to take it home.	*	*	*		
	Competent ecologist to survey pitch for <i>Chamaemaelum nobile</i> .	*				
	CO to record existing management carried out by cricket club.	*				
	CO to discuss appropriate future management of pitch with Cricket Club.	*				
Path clearance	PTC/FoPH to strim paths throughout compartment twice a year in spring/summer. N.B. Some evidence to show minimal risk to reptiles in very hot weather.	*	*	*	*	*
Interpretation	Steering Group to distinguish between information & interpretation, to rationalise site signs accordingly & maximise benefit for all 3 key site aims on any interpretation necessary.	*				
Conserve barrows & create views between them.	CO, in consultation with archaeologist, to create open sward on barrows & views between, by clearing saplings <30cm diameter at chest height from barrows & immediate area (10m) with help of PTC/FoPH/Cricket club. CO/archaeologist to identify trees in surrounding canopy to be crown lifted & shrubs to be thinned or coppiced, to increase views between barrows, especially between barrows 1, 3 & 4. Work to be done in November, on 4yr rotation. i.e. 2 barrows to be cleared each year.	*	*	*	*	*
	Once cleared of trees, PTC/FoPH/Cricket club to annually cut & remove bracken/bramble/scrub within 10m of barrows & from top of barrows. This will minimise disturbance from burrowing	*	*	*	*	*

	<p>animals. Particular care to be taken on barrows adjacent to acid grassland & heather areas i.e barrows 4, 5 & 6. where reptiles maybe present. Bracken to be cut/sprayed in June/July to Mid Aug to minimise disturbance to reptiles. Bramble to be cut repeatedly through growing season to weaken roots, preferably during same time period to minimise disturbance to wildlife. Regrowth to be monitored by CO and treated or cut as required.</p>					
	<p>Where barrows & immediate surround have an established grass sward, cut & remove with brush cutters on a 3yr rotation i.e. 2 barrows per year. To minimise disturbance to reptiles, sward height must be no less than 15cm & work should be carried out between Nov & January.</p>	*	*	*	*	*
	<p>Barrows to be monitored by archaeologists.</p>	*	*	*	*	*
Conserve & enhance wildlife value of compartment	<p>CO, in consultation with archaeologists to establish Ecotones between areas in this compartment and between adjacent compartments.</p>	*				
	<p>CO to identify suitable stands of bracken, bramble & other scrub to be cut no more than once every 3yrs. Stands at the top of south facing slopes to be left for reptiles where possible.</p>	*	*	*	*	*
Woodland management	<p>Standing dead wood and dead stumps to be retained wherever health & safety allows to boost invertebrate populations.</p>	*	*	*	*	*
Survey & Monitor	<p>Habitat & key species in compartment, to be monitored by CO/FoPH including Chamaemelum nobile on pitch, Vaccinium myrtillus on eastern boundary</p>	*	*	*	*	*
	<p>CO to record location, size & aspect of Bracken/Bramble/Gorse/other scrub stands in compartment & monitor for reptiles.</p>	*	*	*	*	*

4.2 ADMINISTRATIVE PRESCRIPTIONS

PTC should consider the appointment of a Countryside Officer and the formation of a Steering Group an urgent priority. It is recommended that talks be held with SDNPA on how best to support the Countryside Officer in post.

Any proposed development in the vicinity of the site should be carefully considered in the light of the aims of Petersfield Heath and the wider aims of the Neighbourhood Plan 2013-28. In particular, creating wildlife corridors between the Heath, other local wildlife sites and the wider countryside should also be a priority.

Currently there is a volunteer programme run by the Friends of Petersfield Heath which includes practical management tasks carried out through the winter months. This programme could be extended to include year-round activities and include a wider section of the community such as schools, other local groups and individuals. It is anticipated that there could be a volunteer training programme to include monitoring and surveying, leadership, volunteer wardening as well as a programme of guided walks and talks. To minimise costs and time involved all attempts should be made to coordinate countryside management with other sites highlighted in the Neighbourhood Plan.

4.3 PROJECT GROUPS

Management

TABLE 8 Summary of management projects

Project	Compartment no.
Maintain & enhance pond	1
Maintain & enhance dry acid grassland	1,2
Maintain & enhance wet acid grassland	2
Maintain & enhance wet & dry lowland heath	2
Maintain & enhance woodland & scattered scrub	2,3,4
Maintain & enhance boundary hedge	1,2,3,4
Control rank growth where necessary	2,3,4

TABLE 9 Summary of monitoring projects

Project	Compartment no.
Survey/monitor vegetation	1,2,3,4
Monitor water quality	1
Monitor water level	1
Monitor fish stocks	1
Survey/monitor invertebrates	1,2,3,4
Survey/monitor birds	1,2,3,4
Monitor protected species	1,2,3,4
Monitor antisocial behaviour	1,2,3,4

5. REFERENCES

Documents

2019 Petersfield Heath Protected Species Surveys, Phlorum Ltd
2017-21 Petersfield Heath Management Plan, CJH Agri Environment Consultants Ltd
2016 Trees of Petersfield Heath, Robin Hart
2015 Petersfield Heath Management Strategy, Dolphin Ecological Surveys
2014 Petersfield Biodiversity Action Plan, PTC
2013-28 Petersfield Neighbourhood Development Plan, PTC
2005-10 Petersfield Heath Management Plan, Heathland Management Services
2002 Petersfield Heath Woodland Management Plan, Johnathon West
1998 Petersfield Heath Management Recommendations, Ron Allen Associates
Hampshire Biodiversity Centre
- 2019 Notable species records
- 2018 Survey Summary
- 2004 Survey Summary
- 2004 Wetland Vegetation Survey
- 1999 Entomological Survey
- 1993 Survey Summary
- 1993 Management Assessment Report, HCC
Appendix 2 Geology, Hydrology, Soils & Edaphic Relations, Ron Allen Associates
Appendix 3 Botanical Report & Recommendations, Dr Frances Rose
Appendix 7 10yr Management & Heathland Restoration Project, NE Hants Heathlands Project

Hampshire Biodiversity Centre

HBIC has its own extensive database of habitat and higher plant data for the County. In addition, HBIC hold copies of datasets belonging to partner organisations. Through data exchange agreements with these organisations HBIC is provided with regular database updates and can supply species information on their behalf. Thanks goes to the following species recording groups for the data provided under these agreements, for the production of this management plan:

Botanical Society of Britain and Ireland's (BSBI) vascular plant database for Hampshire

British Bryological Society (Mosses, Liverworts, Hornworts)

Butterfly Conservation's butterfly and moth database for Hampshire

Hampshire Ornithological Society (HOS) bird records

Hampshire Bat Group (HBG) Records of bat roost visits and sightings

Data administered by the Hampshire and Isle of Wight Wildlife Trust on behalf of:

Hampshire Amphibian and Reptile Recording Network (HARRN)

Hampshire Mammal Group (HMG)

Hampshire records from The Bees, Wasps and Ants Recording Society (BWARS)

Hampshire records from National Stag Beetle Surveys and 'Great Stag Hunts' run by the Peoples Trust for Endangered Species

Hampshire Odonata records from The Dragonfly Recording Network, maintained by the British Dragonfly Society
Spider and Fungi records gleaned from collections housed and curated by the Hampshire Cultural Trust
Independent Hampshire Entomologist's records.

Web References

heathertrust.co.uk
www.wildlifetrusts.org
www.hampshirebiodiversity.org.uk
www.arc-trust.org

Book References

Climatic Classification of England and Wales, Bendelow & Hartnup, 1980

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