

Survey Summary

Petersfield Heath (Heath Common)

31/08/2018-17/10/2018

Site Details

Grid Reference :	SU75502290	File Reference :	72-0161
Total Area :	37.8 ha		
Civil Parish :	Petersfield		
District :	East Hampshire		
Vice-County :	11, South Hampshire		

Survey Details

Survey Type :	Phase II
Survey Date :	31/08/2018-17/10/2018
Survey Time on Site :	Not recorded
Data Owned By :	Hampshire Biodiversity Information Centre Partnership
Data Recorded By :	Philip Wilson

Site Summary

Petersfield Heath is a large SINC on the southern edge of Petersfield. It is much used by the public for general recreation, dog-walking and organised sport. It includes a large artificial lake which occupies most of the west of the site and which was not surveyed in detail. The lake is used for boating and fishing. Most public activity is concentrated around the cafe, playground and landing stage in the north-west, with walking routes leading from here to the east and southeast, and circling the pond. Public access is possible at several places on the heath margin. There is a cricket pitch in the north-east of the site, and much of the eastern part of the heath was used as a golf course.

The heath includes a very important assemblage of prehistoric tumuli which have been the subject of recent archaeological research.

The heath has a mosaic of habitats, with large areas of heathland and acidic grassland within a matrix of secondary woodland, some of which has been planted. A substantial part of the acidic grassland was accidentally burnt in mid-July 2018. Current management appears to concentrate on maintaining the areas of open heath and grassland by annual cutting and manual removal of invasive scrub by the Friends of Petersfield heath volunteer group.

Site Designations

Designation

Site of Importance for Nature Conservation

Site Features

<u>Type</u>	<u>Description</u>
Geology	Folkstone Beds
Geology	Sandgate Beds
Management	Non-intervention
Usage	Amenity
Usage	Public Access

Priority Habitats

Priority Habitats

Purple moor grass and rush pasture
Lowland heathland
Lowland dry acid grassland

Area

Notable Species

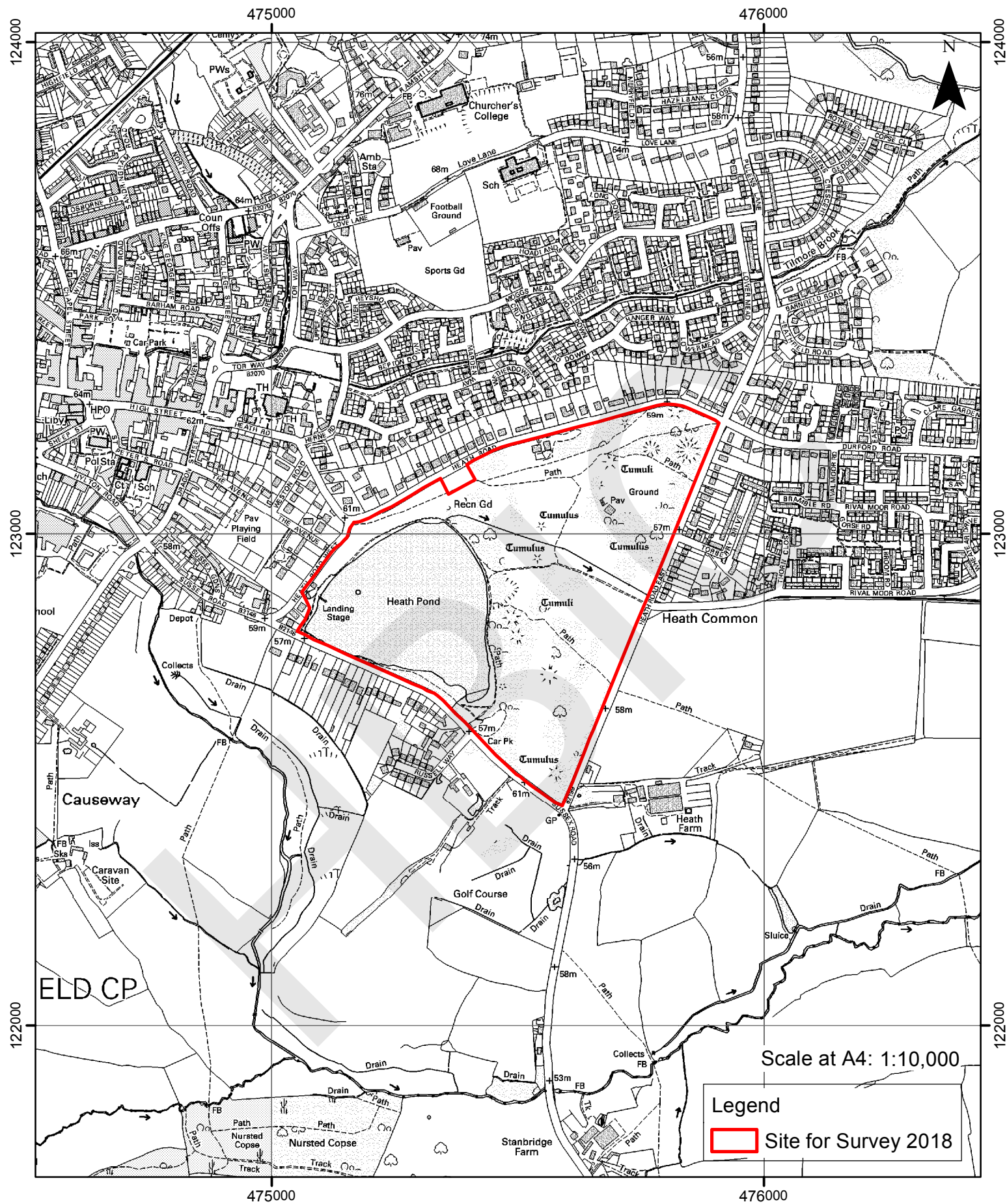
Sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and species recording groups

Date Generated: 27/08/2019

Notable Species

<u>Taxon Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Calluna vulgaris</i>	Heather	IUCN (EN2014) - Near Threatened
<i>Erica cinerea</i>	Bell Heather	IUCN (EN2014) - Near Threatened
<i>Erica tetralix</i>	Cross-leaved Heath	IUCN (EN2014) - Near Threatened
<i>Nardus stricta</i>	Mat-grass	IUCN (EN2014) - Near Threatened
<i>Pinus sylvestris</i>	Scots Pine	Nationally Scarce
<i>Poa bulbosa</i>	Bulbous Meadow-grass	Hampshire BAP Species Nationally Scarce County Scarce South Hampshire Scarce (VC11)
<i>Potentilla erecta</i>	Tormentil	IUCN (EN2014) - Near Threatened
<i>Succisa pratensis</i>	Devil's-bit Scabious	IUCN (EN2014) - Near Threatened



Woodland Structure

Sample:	Canopy						Understory				Coppice			Field Layer		Climber
	Standard	From coppice	Pole stage	Pollard	Veteran or ancient	Planted	Sub-canopy	Shrub	Sapling	Planted	Derelict	Managed stool	Other stool	Seedling	Sucker	
Secondary woodland (Woodland Structure)																
Acer pseudoplatanus		O														
Betula pendula		FA														
Betula pubescens		O														
Crataegus monogyna		O														
Fraxinus excelsior		R														
Ilex aquifolium		A														
Pinus nigra		LF														
Pinus sylvestris		LO														
Quercus robur		D														
Salix cinerea		LA														
Salix euxina x alba = S. x fragil		LA														
Salix viminalis		LF														
Sambucus nigra		R														
Sorbus aucuparia		A														
Taxus baccata		R														

Survey Details

Petersfield Heath (Heath Common)

17/10/2018 - Grassland and heathland (SU75502290)

Habitats Recorded

Priority Habitats

Lowland dry acid grassland
Lowland heathland
Purple moor grass and rush pasture

Area

National Vegetation Classifications

	<u>Area</u>
U1b, Festuca ovina-Agrostis capillaris-Rumex acetosella grassland: Typical subcommunity	15 %
M25a, Molinia caerulea-Potentilla erecta mire: Erica tetralix subcommunity	8 %
U4a, Festuca ovina-Agrostis capillaris-Galium saxatile grassland: Typical subcommunity	6 %
H1a, Calluna vulgaris-Festuca ovina heath: Hypnum cupressiforme subcommunity	4 %
H2c, Calluna vulgaris-Ulex minor heath: Molinia caerulea subcommunity	4 %
M25b, Molinia caerulea-Potentilla erecta mire: Anthoxanthum odoratum subcommunity	4 %
MG7, Lolium perenne leys and related grasslands	4 %
H2a, Calluna vulgaris-Ulex minor heath: Typical subcommunity	2 %
MG1, Arrhenatherum elatius grassland	2 %
M16, Erica tetralix-Sphagnum compactum wet heath	1 %
M23b, Juncus effusus/acetiflorus-Galium palustre rush-pasture: Juncus effusus subcommunity	1 %
U20, Pteridium aquilinum-Galium saxatile community	1 %
MG6, Lolium perenne-Cynosurus cristatus grassland	0.25 %

Species Recorded

<u>Taxon Name</u>	<u>Taxon Common Name</u>	<u>Frequency</u>	<u>Notable</u>
<i>Achillea millefolium</i>	Yarrow	LF	
<i>Agrostis capillaris</i>	Common Bent	FA	
<i>Aira praecox</i>	Early Hair-grass	O	
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	LF	
<i>Aphanes australis</i>	Slender Parsley-piert	O	
<i>Arrhenatherum elatius</i>	False Oat-grass	LA	
<i>Betula pubescens</i>	Downy Birch	R	
<i>Brachythecium albicans</i>	Whitish Feather-moss	O	
<i>Calluna vulgaris</i>	Heather	LD	Y
<i>Carex hirta</i>	Hairy Sedge	LF	
# <i>Carex nigra</i>	Common Sedge	LF	
<i>Centaurea nigra sens. lat. (=nigra/debauxii)</i>	Common Knapweed	R	
<i>Cirsium vulgare</i>	Spear Thistle	R	
<i>Crepis capillaris</i>	Smooth Hawk's-beard	R	
<i>Cytisus scoparius</i>	Broom	R	
<i>Dactylis glomerata</i>	Cock's-foot	R	
# <i>Danthonia decumbens</i>	Heath-grass	R	
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O	
<i>Dicranella varia</i>	Variable Forklet-moss	O	
<i>Dicranum scoparium</i>	Broom Fork-moss	O	
<i>Erica cinerea</i>	Bell Heather	LF	Y
<i>Erica tetralix</i>	Cross-leaved Heath	R	Y
<i>Festuca filiformis</i>	Fine-leaved Sheep's-fescue	FA	
<i>Festuca ovina</i>	Sheep's-fescue	LF	
<i>Festuca rubra</i>	Red Fescue	LF	
<i>Heracleum sphondylium</i>	Hogweed	R	

<u>Taxon Name</u>	<u>Taxon Common Name</u>	<u>Frequency</u>	<u>Notable</u>
<i>Holcus lanatus</i>	Yorkshire-fog	O	
<i>Hypericum perforatum</i>	Perforate St John's-wort	R	
<i>Hypnum jutlandicum</i>	Heath Plait-moss	F	
<i>Hypochaeris radicata</i>	Cat's-ear	RA	
<i>Juncus conglomeratus</i>	Compact Rush	R	
<i>Juncus effusus</i>	Soft-rush	R	
<i>Juncus squarrosus</i>	Heath Rush	R	
<i>Kindbergia praelonga</i>	Common Feather-moss	LF	
<i>Lolium perenne</i>	Perennial Rye-grass	LF	
<i>Luzula campestris</i>	Field Wood-rush	R	
<i>Luzula multiflora</i>	Heath Wood-rush	O	
# <i>Molinia caerulea</i>	Purple Moor-grass	LD	
# <i>Nardus stricta</i>	Mat-grass	R	Y
<i>Ornithopus perpusillus</i>	Bird's-foot	O	
<i>Pinus sylvestris</i>	Scots Pine	R	Y
<i>Plantago coronopus</i>	Buck's-horn Plantain	O	
<i>Plantago lanceolata</i>	Ribwort Plantain	LF	
<i>Plantago major</i>	Greater Plantain	R	
<i>Poa annua</i>	Annual Meadow-grass	R	
<i>Poa bulbosa</i>	Bulbous Meadow-grass	R	Y
<i>Poa humilis</i>	Spreading Meadow-grass	R	
<i>Polygonum arenastrum</i>	Equal-leaved Knotgrass	R	
<i>Polytrichum juniperinum</i>	Juniper Haircap	LO	
<i>Potentilla erecta</i>	Tormentil	LA	Y
<i>Pteridium aquilinum</i>	Bracken	R	
<i>Quercus robur</i>	Pedunculate Oak	R	
<i>Quercus rubra</i>	Red Oak	R	
<i>Rhododendron ponticum</i>	Rhododendron ponticum	LF	
<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss	OF	
<i>Rubus fruticosus</i> agg.	Bramble	R	
<i>Rumex acetosa</i>	Common Sorrel	O	
<i>Rumex acetosella</i>	Sheep's Sorrel	A	
<i>Scorzoneroideis autumnalis</i>	Autumn Hawkbit	R	
<i>Senecio sylvaticus</i>	Heath Groundsel	R	
<i>Sisymbrium officinale</i>	Hedge Mustard	R	
# <i>Succisa pratensis</i>	Devil's-bit Scabious	LF	Y
<i>Taraxacum</i>	Dandelion Agg.	O	
<i>Trifolium repens</i>	White Clover	R	
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	R	
<i>Ulex europaeus</i>	Gorse	R	
<i>Ulex minor</i>	Dwarf Gorse	R	
<u>Taxon Name</u>	<u>Taxon Common Name</u>	<u>Present</u>	<u>Notable</u>
<i>Argiope bruennichi</i>	Wasp Spider	P	
<i>Conocephalus fuscus</i>	Long-winged Cone-head	P	

Species Summary

Total no. of species :	69
No. of woodland species :	31
* No. of AWVP indicators :	0
# No. of acid/neutral grassland indicators :	5

Survey Details

Petersfield Heath (Heath Common) 17/10/2018 - Secondary woodland (SU75502290)

Habitats Recorded

<u>National Vegetation Classifications</u>	<u>Area</u>
W16, Quercus spp.-Betula spp.-Deschampsia flexuosa woodland	25 %
W10c, Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland: Hedera helix subcommunity	8 %
W1, Salix cinerea-Galium palustre woodland	4 %
W6b, Alnus glutinosa-Urtica dioica woodland: Salix fragilis subcommunity	4 %
S23, Other water-margin vegetation	0.25 %
S4a, Phragmites australis swamp and reedbeds: Phragmites australis subcommunity	0.25 %

Species Recorded

<u>Taxon Name</u>	<u>Taxon Common Name</u>	<u>Frequency</u>	<u>Notable</u>
<i>Acer pseudoplatanus</i>	Sycamore	O	
<i>Aegopodium podagraria</i>	Ground-elder	R	
<i>Aesculus hippocastanum</i>	Horse-chestnut	R	
<i>Agrostis capillaris</i>	Common Bent	F	
<i>Betula pendula</i>	Silver Birch	FA	
<i>Betula pubescens</i>	Downy Birch	O	
<i>Bidens tripartita</i>	Trifid Bur-marigold	R	
<i>Calystegia sepium</i>	Hedge Bindweed	LF	
* <i>Carex pendula</i>	Pendulous Sedge	R	
<i>Castanea sativa</i>	Sweet Chestnut	R	
<i>Crataegus monogyna</i>	Hawthorn	O	
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O	
<i>Epilobium hirsutum</i>	Great Willowherb	R	
<i>Fagus sylvatica</i>	Beech	R	
<i>Fraxinus excelsior</i>	Ash	R	
<i>Hedera helix</i>	Ivy	F	
<i>Hypnum jutlandicum</i>	Heath Plait-moss	F	
* <i>Ilex aquifolium</i>	Holly	A	
<i>Kindbergia praelonga</i>	Common Feather-moss	A	
<i>Lycopus europaeus</i>	Gypsywort	R	
<i>Mentha aquatica</i>	Water Mint	R	
<i>Mentha arvensis x aquatica</i> = <i>M. x verticillata</i>	Whorled Mint	R	
<i>Molinia caerulea</i>	Purple Moor-grass	O	
<i>Persicaria amphibia</i>	Amphibious Bistort	R	
<i>Phragmites australis</i>	Common Reed	LA	
<i>Pinus nigra</i>	Corsican Pine	LF	
<i>Pinus sylvestris</i>	Scots Pine	LO	Y
<i>Pseudoscleropodium purum</i>	Neat Feather-moss	F	
<i>Pteridium aquilinum</i>	Bracken	A	
<i>Quercus robur</i>	Pedunculate Oak	D	
<i>Rhododendron ponticum</i>	Rhododendron ponticum	LF	
<i>Rubus fruticosus</i> agg.	Bramble	AD	
<i>Rumex acetosella</i>	Sheep's Sorrel	R	
<i>Salix cinerea</i>	Common Sallow	LA	
<i>Salix euxina x alba</i> = <i>S. x fragilis</i>	Hybrid Crack-willow	LF	
<i>Salix viminalis</i>	Osier	LF	
<i>Sambucus nigra</i>	Elder	R	

<u>Taxon Name</u>	<u>Taxon Common Name</u>	<u>Frequency</u>	<u>Notable</u>
<i>Sorbus aucuparia</i>	Rowan	A	
<i>Taxus baccata</i>	Yew	R	
<i>Tilia platyphyllos</i> x <i>cordata</i> = <i>T. x europaea</i>	Lime	R	
<i>Ulex europaeus</i>	Gorse	O	
<i>Urtica dioica</i>	Common Nettle	LF	

Species Summary

Total no. of species :	42
No. of woodland species :	34
* No. of AWVP indicators :	2

Notes

Habitat Classifications :

Priority: Habitats identified as the highest priority for conservation action in the UK

NVC: A system of classifying natural habitat communities according to species associations

Phase 1: A standardised system for surveying, classifying and mapping broad wildlife habitats including urban areas

Peterken: A stand type classification that describes woodlands by tree species

Indicators Species :

- * Ancient Woodland Vascular Plants (AWVP) - species most strongly associated with ancient woodland and are typical components of botanically rich ancient woodland communities
- # Acid/neutral grassland indicators - species which seldom occur outside of unimproved acid/neutral grasslands or are indicative of a long period of uninterrupted grassland management
- ~ Chalk grassland indicators - species characteristic of unimproved chalk downland or have a strong affinity to calcareous soil

Species Abundance:

Frequency: D=dominant A=abundant F=frequent O=occasional R=rare L=locally

Frequencies within brackets () indicate non-native occurrences

Habitat and Species designations and statuses:

Habitat designations/categories and species legislation/statuses are correct at the time the report was generated and may not necessarily reflect those applicable either at the time of survey or later than the generated date.

Hampshire Habitat Survey Partnership 2018

Petersfield Heath (Heath Common)

Phil Wilson

Petersfield Heath is a large SINC on the southern edge of Petersfield. It is much used by the public for general recreation, dog-walking and organised sport. It includes a large artificial lake which occupies most of the west of the site and which was not surveyed in detail. The lake is used for boating and fishing. Most public activity is concentrated around the café, playground and landing stage in the north-west, with walking routes leading from here to the east and southeast, and circling the pond. Public access is possible at several places on the heath margin. There is a cricket pitch in the north-east of the site, and much of the eastern part of the heath was used as a golf course.

The heath includes a very important assemblage of prehistoric tumuli which have been the subject of recent archaeological research.

The heath has a mosaic of habitats, with large areas of heathland and acidic grassland within a matrix of secondary woodland, some of which has been planted. A substantial part of the acidic grassland was accidentally burnt in mid-July 2018. Current management appears to concentrate on maintaining the areas of open heath and grassland by annual cutting and manual removal of invasive scrub by the Friends of Petersfield heath volunteer group.

The heath was surveyed by HBIC in August 2004. Surveys in 2018 were carried out on 30th and 31st August and 17th October.

The NVC communities were identified and mapped. Representative quadrats were collected from the principal vegetation types present on the site. These quadrats followed standard Phase 2 survey methods. A subjective assessment was made of vegetation condition with a comparison against previous survey results. A series of representative photographs were taken.

Changes since the previous survey

The majority of changes since 2004 have been associated with the development of grassland on areas formerly managed as a golf course.

The distribution of woodland and non-woodland vegetation appears to be similar to that in 2004. Woodland (other than wet woodland) in 2004 was identified as W10, while in 2018 it was mapped as W16. Secondary stands of these communities on acidic soils can be very similar, and it is unlikely that there has been any real change here.

There have however been considerable changes in the distribution of grassland, mire and heathland communities in the south of the site since 2004, and these can be easily seen by viewing imagery between 1999 and 2018 available on Google Earth. In 2004 most of the grassland was mapped as

MG6, a species-poor grassland modified by agricultural inputs possibly associated with previous management. By 2018 much of this had changed to more species-rich semi-natural U1b grassland, M25b *Molinia caerulea*-dominated mire and heathland.

Overall the condition of the site has improved since 2004, with an increase in area of Priority Habitat Lowland Heathland and Lowland Dry Acidic Grassland.

Several notable species have been recorded from the site previously. These include *Chamaemaelum nobile*, *Crassula tillaea*, *Poa bulbosa*, *Trifolium glomeratum*, *Trifolium ornithopodioides* and *Trifolium subterraneum*. All but the first of these are species which are only visible in spring and early summer, and only *Poa bulbosa* was recorded in this survey.

NVC communities

Heathland

H1a *Calluna vulgaris*-*Festuca ovina* heath, *Hypnum cupressiforme* sub-community

Most stands of heathland were classifiable as H1a. This is typically a community of well-drained, nutrient-poor soils. It is species-poor, dominated by a cover of *Calluna vulgaris* of variable density, with abundant *Festuca filiformis* and *Rumex acetosella*. *Agrostis capillaris*, *Erica cinerea* and the mosses *Hypnum jutlandicum* and *Rhytidiadelphus squarrosus* are locally abundant. There are occasional seedlings of *Quercus robur* and *Betula pubescens*.

H2 *Calluna vulgaris*-*Ulex minor* heath

Ulex minor and *Deschampsia flexuosa* are present in the south of the site, in one area joined by *Molinia caerulea* and *Erica tetralix* suggesting a possible transition to H2a *Calluna vulgaris*-*Ulex minor* heath, typical sub-community and H2c *Calluna vulgaris*-*Ulex minor* heath, *Molinia caerulea* sub-community on soils with rather less free drainage. This H2c grades into M25a on wetter soils.

M16 *Erica tetralix*-*Sphagnum compactum* wet heath

Small areas of wet heath dominated by *Molinia caerulea*, *Calluna vulgaris*, *Erica tetralix* and *Juncus squarrosus* were present in a mosaic with M25b and M23b in an area where woodland or scrub may have been cleared.

Mire

M23b *Juncus effusus*/acutiflorus –*Galium palustre* rush-pasture

Small areas dominated by *Juncus effusus* were present in a mosaic with M25b and M16 in an area where woodland or scrub may have been cleared.

M25a *Molinia caerulea*-*Potentilla erecta* mire, *Erica tetralix* sub-community.

On more moisture-retentive soils, the H1 heathland grades into M25 dominated by tussocky *Molinia caerulea*. This is species-poor vegetation with frequent *Potentilla erecta*, *Festuca filiformis* and *Agrostis capillaris*. A range of other species including *Succisa pratensis*, *Calluna vulgaris* and *Juncus squarrosus* are locally present.

M25b *Molinia caerulea*-*Potentilla erecta* mire, *Anthoxanthum odoratum* sub-community.

Stands of M25 with high cover of *Agrostis capillaris*, *Anthoxanthum odoratum*, *Festuca filiformis* and *Carex nigra* were mapped as M25b.

Grassland

U1b *Festuca ovina*-*Agrostis capillaris*-*Rumex acetosella* grassland, typical sub-community.

Most of the grassland here is U1b even where it has evidently been reseeded in the past and heavily trampled in the north-west. This is the characteristic grassland of very freely-draining, acidic, sandy soils in the south-east of England. It is typically rich in spring-flowering winter annuals, but the late date of this survey and the exceptionally hot and dry summer means that these species were under-represented in this survey.

Much of this grassland is typical of the sub-community. *Agrostis capillaris* dominates with abundant *Rumex acetosella* and in most stands *Festuca filiformis*, although this is supplemented or replaced locally by *Festuca ovina* or *Festuca rubra*. Some stands are very parched with much open, sandy soil and species including *Ornithopus perpusillus*, *Aphanes inexpectata*, *Aira praecox*, *Plantago coronopus*, *Poa bulbosa* and *Brachythecium albicans*.

Near the playground/café, the grassland has been improved and re-seeded in the past, although it is now recovering species-richness and will probably develop into U1a in the future. An area of grassland in the east of the site was burnt in July 2018, although after rain there had been some recovery by September with much regeneration of *Carex hirta*, *Rumex acetosella* and *Achillea millefolium*.

U4a *Festuca ovina*-*Agrostis capillaris*-*Galium saxatile* grassland

Grassland on the cricket pitch is closest to U4a. It was recorded as MG7 in 2004, and is probably reverting from a more intensively managed, re-seeded sward. *Agrostis capillaris* was dominant with abundant *Plantago lanceolata*, *Dactylis glomerata*, *Potentilla erecta*, *Trifolium repens*, *Hypochaeris radicata*, *Achillea millefolium*, *Leontodon autumnalis*, *Danthonia decumbens*, *Holcus lanatus*, *Luzula campestris*, *Plantago major* and *Polytrichum juniperinum*.

MG1 *Arrhenatherum elatius* grassland

There are small areas of grassland dominated by *Arrhenatherum elatius* in several places on Petersfield Heath. Only one of these was of a size worthy of mapping.

MG6 *Lolium perenne*-*Cynosurus cristatus* grassland

While much of the grassland was mapped as MG6 in 2004, only a small area was considered to be MG6 in 2018, and this stand graded into U1a. This was a species-poor grassland dominated by *Agrostis capillaris*.

MG7 *Lolium perenne* leys

The amenity grassland in the north-east of the site is MG7, although on the very freely-draining, parched, sandy soils, it is likely that this will develop into U1a in the absence of re-seeding or fertiliser addition. The current mowing regime and heavily public use has led to the presence of much exposed soil and a short sward. The grassland is dominated by *Lolium perenne* with *Plantago lanceolata*, *Achillea millefolium*, *Agrostis capillaris*, *Trifolium repens*, *Plantago coronopus*, *Hypochaeris radicata*, *Carex hirta* and a range of annuals including *Aphanes inexpectata*, *Polygonum arenastrum*, *Sisymbrium officinale*, *Poa annua* and *Matricaria perforata*. *Poa bulbosa* was recorded and *Rumex acetosella* was rare.

Grassland in the north-eastern corner of the heath is likely to have been of this community, but has been greatly modified by the construction of a playground, café, boat landing-stage etc, with much erosion. Several hundred people were using this area at the time of survey.

Woodland

W1 *Salix cinerea* woodland

Dense scrub to the north-east of the pond is dominated by *Salix cinerea* and *Rubus sp.* This grades into W6b as the frequency of other species of *Salix* increases.

W10c *Quercus robur*-*Pteridium aquilinum*-*Rubus fruticosus* woodland, *Hedera helix* woodland.

Woodland to the south-east of the pond, north of the car park is secondary W10c. It is dominated by *Quercus robur* with *Acer pseudoplatanus*, *Crataegus monogyna*, *Betula pendula*, *Sambucus nigra*, *Fraxinus excelsior* and *Salix cinerea* over *Rubus fruticosus*, *Urtica dioica* and *Carex pendula*. There is also a planted stand of this woodland type to the south-west of the pond with several non-native and ornamental species.

W6b *Alnus glutinosus*-*Urtica dioica* woodland, *Salix fragilis* sub-community.

To the north-east of the pond there is a small area of secondary *Salix cinerea*, *Salix viminalis* and *Salix fragilis* woodland over *Rubus fruticosus*, *Phragmites australis* and *Urtica dioica*.

W16 *Quercus spp*-*Betula spp*-*Deschampsia flexuosa* woodland, *Quercus robur* sub-community

All woodland on the site appears to be secondary, some of which may have been originally planted, although most may be invasive over former heath or grassland.

Quercus robur is the major tree species throughout, accompanied in some stands by *Sorbus aucuparia*, *Betula pendula*, *Ilex aquifolium* and *Pinus nigra*. The shrub layer is poorly developed and

of variable density, dominated largely by *Rubus fruticosus* and *Pteridium aquilinum* with scattered *Ilex aquifolium* and *Ulex europaeus*. The ground flora is also species-poor and in some stands, completely absent. The mosses *Eurhynchium praelongum*, *Hypnum jutlandicum* and *Scleropodium purum* are frequent with a sparse cover of *Hedera helix*, *Agrostis capillaris*, *Molinia caerulea*, *Deschampsia flexuosa* and tree seedlings including *Ilex aquifolium* and *Sorbus aucuparia*.

W24 *Rubus fruticosus* agg-*Holcus lanatus* underscrub

Several dense stands of *Rubus spp* are present around the margins of the woodlands.

W25 *Pteridium aquilinum*-*Rubus fruticosus* underscrub

Stands of *Pteridium aquilinum* and *Rubus sp* are associated with woodland margins.

Swamp

Marginal vegetation is not well-developed and is largely confined to the eastern margins of the pond. There are small stands of S4a *Phragmites australis* swamp, *Phragmites australis* sub-community and S23 Other Water-margin Vegetation.

Target Notes

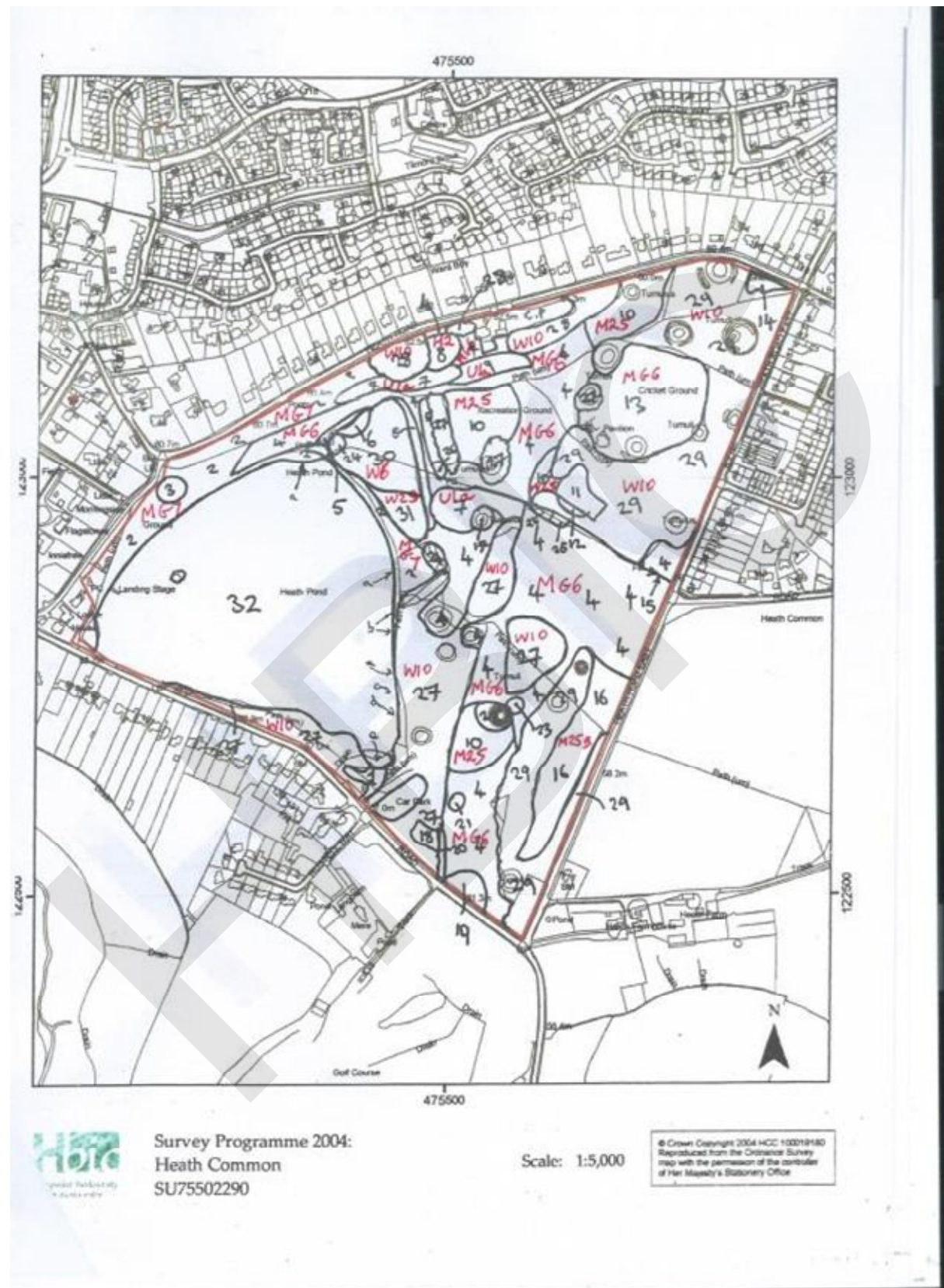
- 1 Secondary woodland, possibly planted. W10c: dominated by *Quercus robur* with *Acer pseudoplatanus*, *Crataegus monogyna*, *Betula pendula*, *Sambucus nigra*, *Fraxinus excelsior* and *Salix cinerea* over *Rubus fruticosus*, *Urtica dioica* and *Carex pendula*.
- 2 Ruderal vegetation dominated by *Urtica dioica* with *Rubus fruticosus*, *Holcus lanatus*, *Dactylis glomerata*, *Heracleum sphondylium* and *Cirsium vulgare*.
- 3 Mosaic of H2c and U1a. Rather trampled. *Ulex minor* rare.
- 4 Large area of M25a. Tussocky *Molinia caerulea*, *Succisa pratensis* present locally.
- 5 Possibly planted W16 woodland dominated by *Quercus robur* and *Pinus nigra*.
- 6 Small patch of H2c including *Deschampsia flexuosa*, grading into cut U20 to the north.
- 7 H2c with more abundant *Molinia caerulea*.
- 8 Mosaic of *Rubus fruticosus* and *Ulex europaeus* scrub with mown U1a.
- 9 Dense, secondary W16 woodland dominated by *Quercus robur*, *Betula pendula*, *Sorbus aucuparia* over *Rubus fruticosus* and *Pteridium aquilinum*. The ground flora includes *Deschampsia flexuosa* and *Molinia caerulea*.
- 10 Marginal vegetation along the eastern side of the pond. Low water levels at the time of survey with exposed mud. Stands of *Phragmites australis* S4a swamp, S23 vegetation includes *Persicaria amphibium*, *Lycopus europaeus*, *Mentha aquatica*, *menthaXverticillata*, *Epilobium hirsutum* and *Bidens tripartita*.
- 11 Small area of young, secondary W6b. *Salix cinerea*, *Salix viminalis* and *Salix fragilis* woodland over *Rubus fruticosus*, *Phragmites australis* and *Urtica dioica*.
- 12 Mown and heavily trampled amenity grassland probably re-seeded but now reverting to more species-rich U1. Much bare sand with potential for annual plant species. *Poa bulbosa* present.
- 13 Outside the SINC boundary, but similar to grassland inside the site.
- 14 Small area of W16a secondary woodland.
- 15 Good quality U1b. Less trampled and probably not re-seeded. Much potential for annual plants.
- 16 H1a heath with locally dense *Calluna vulgaris* with *Erica cinerea*. Possible heather beetle damage.
- 17 Large patch of tall, tussocky *Molinia caerulea*-dominated M25a. The spider *Argiope bruennichii* and the long-winged conehead bush cricket was present.
- 18 Large *Pinus sylvestris* trees on tumuli, joined to nearby woodland by recently cut *Rubus fruticosus* scrub.

- 19 Possibly scrub/woodland clearance, now with a mosaic of M25b, M16 and M23b dominated by *Molinia caerulea* and *Juncus effusus*.
- 20 Large tumulus with *Pteridium aquilinum* surrounded by mown grassland and *Rubus fruticosus*.
- 21 Secondary W16 woodland with tumuli, locally cleared with dense regeneration.
- 22 Cricket pitch. Species-rich grassland related to U1b, but including a few species characteristic of more mesotrophic swards, including *Danthonia decumbens*, *Potentilla erecta* and *Luzula campestris*. *Chamaemaelum nobile* recorded in 2004, but not found in 2018.
- 23 Mosaic of H1a heath and *Pteridium aquilinum* dominated U20.
- 24 Uniform and species-poor W10c woodland.
- 25 Tall U1b with encroaching *Ulex europaeus*, *Cytisus scoparius*, *Rubus fruticosus* and *Quercus robur*. The grassland here includes *Molinia caerulea*, *Centaurea nigra* and *Hypericum perforatum*.
- 26 Relatively mesotrophic U1b burnt in July 2018. Much regeneration of species such as *Carex hirta*, *Plantago lanceolata*, *Achillea millefolium* and *Rumex acetosella* since recent rain.
- 27 Mosaic of *Molinia caerulea*-dominated M25b with H1a and H2c.
- 28 Planted woodland to the west of the car park. W10 with *Quercus robur*, *Pinus sylvestris*, *Rhododendron ponticum*, *Aesculus hippocastaneum*, *Betula pendula*, *Fagus sylvatica*, *TiliaX europaea*, *Castanea sativa* and *Taxus baccata*.
- 29 Large patch of U1b with an old sandpit to the west. Patches of *Calluna vulgaris* and *Nardus stricta*.
- 30 Young W16a woodland dominated by *Betula pendula*.
- 31 Small clearing between 29 and 26 has relatively mesotrophic U1b grassland.

NVC communities and other land-use types in 2018.



Distribution of habitats at Petersfield Heath in 2004 (From Ralphs, 2004).



Quadrat, target note and photograph locations. Quadrats in red, target note locations in orange and photograph locations in blue.



Table 1.

Species lists from the main NVC stand types present. Abundances on the DAFOR scale.

U1a

<i>Achillea millefolium</i>	Lf
Acrocarpous moss	Lf
<i>Agrostis capillaris</i>	A
<i>Aira praecox</i>	O
<i>Aphanes inexpectata</i>	O
Bare sand	A
<i>Brachythecium albicans</i>	O
<i>Carex hirta</i>	Lf
<i>Festuca ovina</i>	Lf
<i>Festuca rubra</i>	Lf
<i>Festuca filiformis</i>	Fa
<i>Holcus lanatus</i>	O
<i>Hypochaeris radicata</i>	La
<i>Luzula campestris</i>	R
<i>Nardus stricta</i>	R
<i>Ornithopus perpusillus</i>	O
<i>Plantago lanceolata</i>	Lf
<i>Poa annua</i>	R
<i>Poa humilis</i>	R
<i>Rhytiadelphus squarrosus</i>	Lf
<i>Rumex acetosa</i>	O
<i>Rumex acetosella</i>	A
<i>Trifolium repens</i>	R
<i>Polytrichum juniperinum</i>	Lo
<i>Lolium perenne</i>	Lf
<i>Plantago coronopus</i>	O
<i>Dicranum scoparium</i>	R
<i>Senecio sylvaticus</i>	R
<i>Ulex europaeus</i>	R
<i>Centaurea nigra</i>	R
<i>Molinia caerulea</i>	R
<i>Hypericum perforatum</i>	R
<i>Cytisus scoparius</i>	R
<i>Quercus robur</i>	R
<i>Crepis capillaris</i>	R
<i>Calluna vulgaris</i>	R

M25

<i>Agrostis capillaris</i>	A
<i>Anthoxanthum odoratum</i>	Lf
<i>Calluna vulgaris</i>	R
<i>Carex nigra</i>	Lf

<i>Deschampsia flexuosa</i>	O
<i>Erica tetralix</i>	R
<i>Festuca rubra</i>	Lf
<i>Festuca filiformis</i>	A
<i>Juncus effusus</i>	r
<i>Juncus squarrosus</i>	R
<i>Eurhynchium praelonga</i>	Lf
<i>Luzula multiflora</i>	O
<i>Molinia caerulea</i>	D
<i>Nardus stricta</i>	R
<i>Pinus sylvestris</i>	R
<i>Potentilla erecta</i>	A
<i>Quercus robur</i>	R
<i>Rhytiadelphus squarrosus</i>	O
<i>Rubus fruticosus</i>	R
<i>Succisa pratensis</i>	Lf

H1/H2

<i>Calluna vulgaris</i>	D
<i>Festuca filiformis</i>	A
<i>Erica cinerea</i>	Lf
<i>Hypnum jutlandicum</i>	F
<i>Rumex acetosella</i>	A
<i>Dicranum scoparium</i>	O
<i>Agrostis capillaris</i>	F
<i>Rhytiadelphus squarrosus</i>	F
<i>Dicranella varia</i>	O
<i>Betula pubescens</i>	R
<i>Erica tetralix</i>	R
<i>Potentilla erecta</i>	F
<i>Anthoxanthum odoratum</i>	O
<i>Quercus robur</i>	R
<i>Molinia caerulea</i>	Lf
Bare sand	O
<i>Juncus squarrosus</i>	O
<i>Hypochaeris radicata</i>	R
<i>Pteridium aquilinum</i>	R
<i>Juncus conglomeratus</i>	R
<i>Nardus stricta</i>	R
<i>Ulex minor</i>	R
<i>Aira praecox</i>	R

W10/W16

<i>Acer pseudoplatanus</i>	O
<i>Aegopodium podagraria</i>	R
<i>Agrostis capillaris</i>	F
<i>Betula pendula</i>	Fa
<i>Betula pubescens</i>	O
<i>Calystegia sepium</i>	Lf
<i>Carex pendula</i>	R
<i>Crataegus monogyna</i>	O
<i>Deschampsia flexuosa</i>	O
<i>Fraxinus excelsior</i>	R
<i>Hedera helix</i>	F
<i>Hypnum jutlandicum</i>	F
<i>Ilex aquifolia</i>	A
<i>Eurhynchium praelongum</i>	A
<i>Molinia caerulea</i>	O
<i>Pinus nigra</i>	Lf
<i>Pinus sylvestris</i>	Lo
<i>Scleropodium purum</i>	F
<i>Pteridium aquilinum</i>	A
<i>Quercus robur</i>	D
<i>Rubus fruticosus</i>	Ad
<i>Rumex acetosella</i>	R
<i>Salix cinerea</i>	R
<i>Sambucus nigra</i>	R
<i>Sorbus aucuparia</i>	A
<i>Taxus baccata</i>	R
<i>Ulex europaeus</i>	O
<i>Urtica dioica</i>	Lf

Table 2. Species list. Whole site.

<i>Acer pseudoplatanus</i>	Sycamore
<i>Achillea millefolium</i>	Yarrow
Acrocarpous moss	
<i>Aegopodium podagraria</i>	Ground elder
<i>Aesculus hippocastaneum</i>	Horse chestnut
<i>Agrostis capillaris</i>	Common bent
<i>Aira praecox</i>	Early hair-grass
<i>Anthoxanthum odoratum</i>	Sweet vernal-grass
<i>Aphanes inexpectata</i>	Small parsley piert
<i>Betula pendula</i>	Silver birch
<i>Betula pubescens</i>	Downy birch
<i>Bidens tripartita</i>	Trifid bur-marigold
<i>Brachythecium albicans</i>	Moss
<i>Calluna vulgaris</i>	Heather
<i>Calystegia sepium</i>	Hedge bindweed
<i>Carex hirta</i>	Hairy sedge
<i>Carex pendula</i>	Pendulous sedge
<i>Castanea sativa</i>	Sweet chestnut
<i>Centaurea nigra</i>	Black knapweed
<i>Cirsium vulgare</i>	Spear thistle
<i>Crataegus monogyna</i>	Hawthorn
<i>Crepis capillaris</i>	Smooth hawksbeard
<i>Cytisus scoparius</i>	Broom
<i>Dactylis glomerata</i>	Cocksfoot
<i>Danthonia decumbens</i>	Heath grass
<i>Deschampsia flexuosa</i>	Wavy hair-grass
<i>Dicranella varia</i>	Moss
<i>Dicranum scoparium</i>	Moss
<i>Epilobium hirsutum</i>	Great hairy willow-herb
<i>Erica cinerea</i>	Purple bell-heather
<i>Erica tetralix</i>	Cross-leaved heath
<i>Fagus sylvatica</i>	Beech
<i>Festuca ovina</i>	Sheep's fescue
<i>Festuca rubra</i>	Red fescue
<i>Festuca filiformis</i>	Fine-leaved fescue
<i>Fraxinus excelsior</i>	Ash
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire fog
<i>Hypericum perforatum</i>	Perforate St John's wort
<i>Hypnum jutlandicum</i>	Moss
<i>Hypochaeris radicata</i>	Common cat's-ear
<i>Ilex aquifolia</i>	Holly
<i>Juncus conglomeratus</i>	Compact rush
<i>Juncus effusus</i>	Soft rush
<i>Juncus squarrosus</i>	Heath rush
<i>Eurhynchium praelonga</i>	Moss
<i>Leontodon autumnalis</i>	Autumn hawkbit

<i>Lolium perenne</i>	Perennial rye-grass
<i>Luzula campestris</i>	Common wood-rush
<i>Luzula multiflora</i>	Heath wood-rush
<i>Lycopus europaeus</i>	Gipsywort
<i>Matricaria perforata</i>	Pineapple weed
<i>Mentha aquatica</i>	Water mint
<i>MenthaXverticillatum</i>	Hybrid waterXfield mint
<i>Molinia caerulea</i>	Purple moor-grass
<i>Nardus stricta</i>	Mat grass
<i>Ornithopus perpusillus</i>	Common bird's-foot
<i>Persicaria amphibia</i>	Redshank
<i>Phragmites australis</i>	Common reed
<i>Pinus nigra</i>	Corsican pine
<i>Pinus sylvestris</i>	Scot's pine
<i>Plantago coronopus</i>	Buckhorn plantain
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Plantago major</i>	Greater plantain
<i>Poa annua</i>	Annual meadow-grass
<i>Poa bulbosa</i>	Bulbous meadow-grass
<i>Poa humilis</i>	Spreading meadow-grass
<i>Polygonum arenastrum</i>	Equal-leaved knotgrass
<i>Polytrichum juniperinum</i>	Moss
<i>Potentilla erecta</i>	Tormentil
<i>Scleropodium purum</i>	Moss
<i>Pteridium aquilinum</i>	Bracken
<i>Quercus borealis</i>	Red oak
<i>Quercus robur</i>	Oak
<i>Rhododendron ponticum</i>	Rhododendron
<i>Rhytiadelphus squarrosus</i>	Moss
<i>Rubus fruticosus</i>	Bramble
<i>Rumex acetosa</i>	Sorrel
<i>Rumex acetosella</i>	Sheep's sorrel
<i>Salix cinerea</i>	Sallow
<i>Salix fragilis</i>	Crack willow
<i>Salix viminalis</i>	Osier
<i>Sambucus nigra</i>	Elder
<i>Senecio sylvatica</i>	Heath groundsel
<i>Sisymbrium officinale</i>	Hedge mustard
<i>Sorbus aucuparia</i>	Rowan
<i>Succisa pratensis</i>	Devil's-bit scabious
<i>Taraxacum sp</i>	Dandelion
<i>Taxus baccata</i>	Yew
<i>TiliaXeuropaea</i>	Common lime
<i>Trifolium repens</i>	White clover
<i>Ulex europaeus</i>	Common gorse
<i>Ulex minor</i>	Dwarf gorse
<i>Urtica dioica</i>	Stinging nettle

Table 3. U1a Grassland quadrats. Abundances on the Domin scale.

	3	6	10	11	13
<i>Rumex acetosella</i>	7	7	7	7	5
<i>Festuca filiformis</i>	6	2			
<i>Agrostis capillaris</i>	4	5	4	5	8
Bare sand	4	3	5	7	5
<i>Rhytiadelphus squarrosus</i>	3				
<i>Festuca rubra</i>		5		3	
<i>Achillea millefolium</i>		4			3
<i>Rumex acetosa</i>		4			
<i>Plantago lanceolata</i>		4		3	
<i>Poa humilis</i>		3			
<i>Holcus lanatus</i>		2		1	
<i>Luzula campestris</i>		2			
Acrocarpous moss			5		
<i>Ornithopus perpusillus</i>			2		1
<i>Aira praecox</i>			2		
<i>Nardus stricta</i>			1		
<i>Carex hirta</i>				4	
<i>Hypochaeris radicata</i>				5	1
<i>Trifolium repens</i>				2	
<i>Festuca ovina</i>					4
<i>Poa annua</i>					2
<i>Aphanes inexpectata</i>					3
<i>Brachythecium albicans</i>					4

Table 4. M25 mire quadrats. Abundances on the Domin scale.

NVC community	M25a	M25a	M25a	M25b
<i>Molinia caerulea</i>	9	10	9	6
<i>Potentilla erecta</i>	4	3	3	6
<i>Festuca filiformis</i>	4		4	4
<i>Agrostis capillaris</i>	2		4	7
<i>Quercus robur</i>	1			
<i>Eurhynchium praelonga</i>		3		
<i>Luzula multiflora</i>		1		
<i>Rhytiadelphus squarrosus</i>			3	3
<i>Nardus stricta</i>			1	
<i>Festuca rubra</i>				3
<i>Anthoxanthum odoratum</i>				4
<i>Carex nigra</i>				4

Table 5. Heathland quadrats. Abundances on the Domin scale.

	2	8	9	12
NVC community	H1a	H1a	H1a	H2c
<i>Calluna vulgaris</i>	7	7	5	8
<i>Festuca filiformis</i>	7	3	5	4
<i>Erica cinerea</i>	4			
<i>Hypnum jutlandicum</i>	3	3		3
<i>Rumex acetosella</i>	2	6	6	
<i>Dicranum scoparium</i>	2			
<i>Agrostis capillaris</i>		5	6	
<i>Rhytiadelphus squarrosus</i>		4	4	
<i>Dicranella varia</i>		3		
<i>Betula pubescens</i>		1		
<i>Erica tetralix</i>			4	
<i>Potentilla erecta</i>			3	4
<i>Anthoxanthum odoratum</i>			3	
<i>Quercus robur</i>			1	
<i>Molinia caerulea</i>				7
Bare sand				2
<i>Juncus squarrosus</i>				3

Table 6. W16a woodland quadrats. Abundances on the Domin scale.

	1	2	3	4	5
Canopy					
<i>Quercus robur</i>	7	6	7	6	9
<i>Sorbus aucuparia</i>	6	2	4	4	
<i>Betula pendula</i>	6	6	1		
<i>Ilex aquifolia</i>			4	6	
<i>Betula pubescens</i>			1		
<i>Pinus sylvestris</i>				1	
Shrub layer					
<i>Rubus fruticosus</i>	8	6	8	7	9
<i>Pteridium aquilinum</i>	4	4	6	6	
<i>Ilex aquifolium</i>	1	2		4	3
<i>Ulex europaeus</i>	1	3		1	
<i>Taxus baccata</i>				1	
Ground flora					
<i>Eurhynchium praelongum</i>		5		2	
<i>Hypnum jutlandicum</i>		2		2	
<i>Hedera helix</i>		2		2	
<i>Scleropodium purum</i>		3		2	
<i>Agrostis capillaris</i>		3			1
<i>Molinia caerulea</i>				1	
<i>Deschampsia flexuosa</i>		5			
<i>Ilex aquifolium</i>					1
<i>Sorbus aucuparia</i>					1

Photographs

1 Amenity grassland



2 H1a heathland



3 H1 heathland: heather beetle damage



4 M25a



5 Burnt U1a



6 Gradation from W25/U1 to M25a



7 Secondary W16 woodland



8 Burnt U1a. Regenerating *Plantago lanceolata* and *Rumex acetosella*.



9 Cricket pitch



10 M23b and M25a. Tumuli in the background



11 M25b with patches of H2



12 Pond

