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SAC: Thursley, Ash, Pirbright and Chobham
SPA: Thames Basin Heaths
Component SSSI: Ash to Brookwood Heaths

Conservation objective for the European Interest on the SSSI

The conservation objectives for the European interest on the SSSI are:

to maintain*, in favourable condition, the Northern Atlantic wet heath with cross-leaved heath (*Erica tetralix*).

to maintain*, in favourable condition, the depressions on peat substrates.

to maintain*, in favourable condition, the dry heath.

to maintain*, in favourable condition, the habitats of the bird species of European importance [+], with particular reference to lowland heathland

[+]Dartford Warbler, Nightjar & Woodlark

* maintenance implies restoration if the feature is not currently in favourable condition.

The conservation objectives for the Thursley, Ash, Pirbright and Chobham Commons Special Area of Conservation are, in accordance with para C 10 of PPG 9, the reasons for which the SAC was designated. The SSSI also forms part of the Thames Basin Heaths Special Protection Area.

Annex:
Favourable Condition Table.

Favourable Condition Table

The Favourable Condition Table will be used by English Nature and other relevant authorities to determine if a site is in favourable condition. Favourable condition is achieved when the targets given below are met.

The favourable condition table should inform the scope and nature of any 'appropriate assessment' under the Habitats Regulations, but an appropriate assessment will also require consideration of issues specific to the individual plan or project. The favourable condition table does not by itself provide a comprehensive basis on which to assess plans and projects as required under Regulations 20-21, 24, 48-50 and 54 - 85. The scope and content of an appropriate assessment will depend upon the location, size and significance of the proposed project. English Nature will advise on a case by case basis.

Following an appropriate assessment, competent authorities are required to ascertain the effect on the integrity of the site. The integrity of the site is defined in para C10 of PPG9 as the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified. The determination of favourable condition is separate from the judgement of effect upon integrity. For example, there may be a time-lag between a plan or project being initiated and a consequent adverse effect upon integrity becoming manifest in the condition assessment. In such cases, a plan or project may have an adverse effect upon integrity even though the site remains in favourable condition.

Annual counts for qualifying bird species will be used by English Nature, in the context of five year peak means, together with available information on UK population and distribution trends, to assess whether the SPA is continuing to make an appropriate contribution to the Favourable Conservation Status of the species across Europe.

Operational feature	Criteria feature	Attribute	Measure	Target	Comments
Wet heath	M16 mires	Extent	Area	Maintain existing area on its current sites	
	M16 mires	Bare ground	Extent of 'natural' bare ground (mineral soil) in intimate mosaic within vegetation Extent of 'heavily disturbed' stock poached, eroded or heavily used parallelling paths	'Natural' between 1-5% 'Heavily disturbed' <1%	Bare ground is very important, particularly for certain plant, invertebrate, amphibian and reptile species.
	M16 mires	Vegetation Structure	Percentage cover of *Schoenus nigricans* tussocks Percentage cover of *Molinia caerulea* tussocks Percentage cover of *Sphagnum* spp. Percentage cover of *Calluna vulgaris* and *Erica tetralix.*	> 20% *Schoenus* tussocks Scattered tussocks of *Molinia caerulea* but <50% cover >20% ericoids and >20% sphagnum cover Mosaic with *Calluna vulgaris* and *Erica tetralix.* < 30% *Ulex europaeus* in drier sites	M16 presents variable mixtures of *Erica tetralix, Calluna vulgaris, Molinia caerulea* (and *Scirpus cespitosus* in the NW) in open, low stands, with a ground cover of bryophytes and lichens. Grazing, burning and water regime may transform the appearance of particular stands and produce greater structural diversity. *Schoenus* is a tussocky plant which gives the vegetation its distinctive structural character when it is present. Common gorse (*Ulex europaeus)* appears in disturbed sites.
	M16 mires	Vegetation Composition	Frequency of any of the following species when present: **List A** *Schoenus nigricans, Molinia caerulea, Erica tetralix, Narthecium ossifragum* and *Sphagnum spp.* **List B** *Anagallis tenella, Eriophorum* spp., *Rhynchospora alba, Myrica gale, Carex panicea, Drosera* spp., *Succisa pratensis, Juncus squarrosus, Eleocharis multicaulis; Calluna vulgaris, Erica ciliaris, Erica cinerea, Ulex minor, Ulex gallii, Scirpus cespitosus; Potentilla erecta*.	**All** species from List A must be at least frequent. At least **two** species of list B at least occasional	Species were chosen for their sensitivity to water levels and changes in management. *Schoenus nigricans* is very local on wet heaths in Surrey. *Calluna* presents a weak growth in wetter areas. Vegetation composition and hence vegetation structure is sensitive to eutrophication (e.g. from atmospheric deposition)
	M16 mires	Vegetation Composition:	Percentage cover.	Presence of *Gentiana pneumonanthe, Rhynchospora*	Rare species appear among bushes of *E. tetralix* and low *Calluna*.

		rare species		*fusca, Lycopodiella inundata, Deschampsia setacea.*	*tetralix* and low *Calluna*.
	M16 mires	Negative indicators	Percentage cover of any of the following species when present: *Salix cinerea* *Betula pubescens* *Pinus* spp. *Alnus glutinosa*	< 5% cover tree seedlings	Light grazing or occasional burning may help maintain the vegetation by setting back any invasion of woody plants. Uncontrolled burning or grazing, on the other hand, impoverishes vegetation.
	M16 mires	Negative indicators	Presence of drains and erosion.	No artificial drains or grips with active nick point / headward erosion into peat and gravel.	Drainage and erosion will produce a loss of the feature area.
	M21 mire	Extent	Area	Maintain existing area on its current sites. No loss of area attributable to artificial drainage channels or lowering of water table.	Assess by aerial photography
	M21 mire	Bare ground	Extent of 'natural' bare ground (mineral soil) in intimate mosaic within vegetation Extent of 'heavily disturbed' stock poached, eroded or heavily used paralleling paths	'Natural' between 1-5% 'Heavily disturbed' <1%	Permanently waterlogged, acid and oligotrophic peats. Peat depth between 20 and 150 cm. Presence of natural channels with flowing water. Ground soft, bouncy and squelchy.
	M21 mire	Vegetation Structure	Percentage cover of ericoids. Percentage cover of *Sphagnum* spp. Percentage cover of *Molinia caerulea* tussocks	>15% ericoids (*Calluna vulgaris* and *Erica tetralix* or *E. ciliaris*) and >25% sphagnum cover Scattered tussocks of *M. caerulea* but <50% cover	Mire vegetation dominated by carpets of Sphagna with scattered herbs and sub-shrubs. It occurs in mosaics and zonations with other vegetation types in relation to the water-table. Sub-shrubs form a very open canopy, up to 30 cm high. *Calluna* may present a sick appearance due to the water level.
	M21 mire	Vegetation Composition	Frequency of any of the following species when present: **List A** *Molinia caerulea, Calluna vulgaris, Erica tetralix, Narthecium ossifragum, Eriophorum angustifolium* and *Sphagnum spp.*	**All** species from List A must be at least frequent. At least **two** species of list B at least occasional	Species were chosen for their sensitivity to water levels and changes in management. *Narthecium ossifragum* and *Drosera rotundifolia* are confined to areas of wet, bare peat.

			List B *Erica ciliaris, Rhynchospora alba, Myrica gale, Carex panicea, Drosera* spp., *Potentilla erecta, Polygala serpyllifolia*.		*Molinia caerulea* only form tussocks in well aerated situations. Vegetation composition and hence vegetation structure is sensitive to eutrophication (e.g. from atmospheric deposition)
	M21 mire	Vegetation Composition: rare species	Presence of rare species.	Presence of *Sphagnum magellanicum, S. pulchrum, Hammarbya paludosa*.	Scarce Sphagna species in SE Britain may appear in abundance here.
	M21 mire	Negative indicators	Percentage cover of any of the following species when present: *Pinus* spp. *Betula* spp. *Alnus* spp.	< 30 % cover degenerate/dead *Calluna vulgaris* < 5% cover trees or tree seedlings.	Grazing and burning usually do not damage the vegetation unless accompanied by draining.
	M21 mire	Negative indicators	Presence of drainage or erosion.	No presence of artificial drains or grips with active nick point / headward erosion into peat and gravel.	Draining is very deleterious and has severely affected some stands.
	Depressions on peat substrates of the Rhyncosporion , M16 and M21	Area	Extent and location	Maintain areas on current sites, recognizing ephemeral nature of this type of vegetation	Open patches of humid bare or recently exposed peat on wet heath and mire, including around edges of seasonal bog pools and artificially disturbed areas such as footpaths, tracks and old peat cuttings.
	Depressions on peat substrates of the Rhyncosporion , M16 and M21	Vegetation composition	Frequency of any of the following species when present: *Rhynchospora alba, Sphagnum auriculatum, Lycopodiella inundata, Drosera rotundifolia, Drosera intermedia*	At least **three** species should be present in addition to *Rhynchospora alba*.	This community occurs as part of a mosaic associated with valley bog and wet heath.
	Depressions on peat substrates of the Rhyncosporion , M16 and M21	Water quality	Lack of evidence of increase in fertility	Water source should be base-poor and not contain plant macro nutrients	Quality of water source is important.
	Depressions on peat substrates of the Rhyncosporion ,	Water supply	Clear evidence of spring issues and seepage water feeding the valley head mire throughout the year	Maintain the peizometric head and areal spread of the water supply. No loss of area attributable to artificial drainage	Groundwater discharge and surface run-off are important. Seasonality of inundation within a fluctuating water level regime may be important and this needs to be maintained

	M16 and M21			channels or lowering of water table	within the normal range of variation experienced over at least ten years.
Dry heath	H1 dry heathland	Extent	Area	Maintain existing area on its current sites	This community is confined to base-poor and oligotrophic sandy soils in the more continental lowlands of Eastern England. Large areas have been lost or fragmented to agriculture and forestry in the past.
	H1 dry heathland	Bare ground	Extent of 'natural' bare ground (mineral soil) in intimate mosaic within vegetation Extent of 'heavily disturbed' stock poached, eroded or heavily used paralleling paths	'Natural' between 10-25% 'Heavily disturbed' <1%	Bryophytes and lichens are more extensive and diverse among open covers of *Calluna*.
	H1 dry heathland	Vegetation Structure	Percentage of cover of *Calluna vulgaris* in different stages of its life cycle.	Cover of *Calluna vulgaris* to be between 25% minimum and 90% maximum. Mosaic with >10% young and 30-50% mature / degenerate *Calluna vulgaris* within unit. < 25% *Ulex europaeus*	*Calluna vulgaris* is often the only woody species present. Its cover and height are very variable. Grasses, when they occur, are present as scattered tussocks. *Ulex europaeus* occurs mainly in disturbed areas.
	H1 dry heathland	Vegetation Composition	Frequency of any of the following species when present: **List A** *Calluna vulgaris* **List B** *Agrostis capillaris, Festuca ovina, Deschampsia flexuosa*	**All** species from List A must be at least frequent. At least **two** species of list B are at least occasional	Associated flora is for the most part confined to areas between *Calluna* clumps and the center of collapsing bushes. Vegetation composition and hence vegetation structure is sensitive to eutrophication (e.g. from atmospheric deposition)
	H1 dry heathland	Negative indicators	Frequency and percentage cover of any of the following species when present: *Pteridium aquilinum* *Rhododendron ponticum* *Rubus* spp. *Senecio* spp. *Urtica dioica* *Pinus* spp. *Betula* spp. *Quercus* spp.	< 50 % cover degenerate/dead *Calluna vulgaris* No *Rhododendron ponticum* < 1 % *Rubus* spp., *Senecio* spp., *Urtica dioica*, creeping or spear thistle < 5% scrub, trees or tree seedlings. < 25%*Pteridium aquilinum*	*Rhododendron ponticum* and *Gaultheria shallon* can spread rapidly and have a negligible nature conservation value. Dense rhododendron casts deep shade which excludes other vegetation. Scrub (shrubs, trees or tree seedlings) above 1 m in height is an important component of the heathland but its cover should be stable or not increasing as a whole. Management of bracken should be directed more to control than eradication.

					more to control than eradication.
	H2, H3, dry and humid heathland	Extent	Area	Maintain existing area on its current sites	H2 is characteristic of impoverished acid soils, predominantly free draining in SE and central southern England. H3 is more or less confined to S Hampshire and Dorset, but also occurs on the Thames Basin heaths.
	H2, H3, dry and humid heathland	Bare ground	Extent of 'natural' bare ground (mineral soil) in intimate mosaic within vegetation Extent of 'heavily disturbed' stock poached, eroded or heavily used paralleling paths	'Natural' between 1-10% 'Heavily disturbed' <1%	Bare ground is very important, particularly for certain plant, invertebrate, reptile and amphibian species.
	H2, H3, dry and humid heathland	Vegetation Structure	Percentage cover of *Calluna vulgaris* in different stages of its life cycle. Percentage cover of *Ulex europaeus*.	Total *Calluna vulgaris* cover between 25 and 90%. Mosaic with >10% young and 30-50% mature / degenerate *Calluna vulgaris* within unit. Occasional to frequent bushes of *Ulex europaeus* to scattered brakes, cover not to exceed 30% of any unit.	Canopy very variable in height. Burning and grazing produce a mosaic of different heather stages but where it has ceased many stands are covered with leggy *Calluna*. *Ulex europaeus* occurs mainly in disturbed areas.
	H2, H3, dry and humid heathland	Vegetation Composition	Frequency of any of the following species when present: **List A** *Calluna vulgaris*, *Ulex minor* or *U. gallii*, *Agrostis curtisii*, *Molinia caerulea* and *Deschampsia flexuosa* **List B** *Erica cinerea*, *Erica tetralix*, *Potentilla erecta*, *Festuca ovina*, *Vaccinium myrtillus*, *Galium saxatile* and *Scirpus cespitosus*	**All** species from List A must be at least frequent. At least **one** species of list B is at least occasional	*Ulex minor* is characteristic of H2 and H3 *Molinia caerulea* and *Deschampsia flexuosa* can spread extensively after burning. Burning and grazing modify soil-related patterns and control woodland invasion. Vegetation composition and hence vegetation structure is sensitive to eutrophication (eg. from atmospheric deposition)
	H2, H3, dry and humid heathland	Negative indicators	Frequency and percentage cover of any of the following species when present: *Rhododendron ponticum* *Gaultheria shallon* *Pteridium aquilinum* *Rubus* spp. *Senecio* spp. *Urtica dioica*	< 30%cover degenerate/dead heather No *Rhododendron ponticum* < 1 %*Rubus* spp., *Senecio* spp., *Urtica dioica*, *Cirsium arvense (added 21/1/00)*, *Cirsium vulgare*	*Rhododendron ponticum* and *Gaultheria shallon* can spread rapidly and have a negligible nature conservation value. Dense rhododendron casts deep shade which excludes other vegetation. Management of bracken should be directed more to control than eradication.

			Pinus spp. *Quercus* spp. *Betula* spp. *Sorbus aucuparia* *Ilex aquifolium* *Cirsium arvense* *Cirsium vulgare*	< 5% scrub, tree or tree seedlings. < 25% *Pteridium aquilinum*	Some trees and scrub may be important for the maintenance of the condition of the heathland habitat.
Heathland	Dartford Warbler	Landscape	Large, unbroken dwarf-shrub layer of heather with scattered gorse	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined
	Dartford Warbler	Food availability	Abundance of shrub-layer invertebrates	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined
	Dartford Warbler	Vegetation characteristics	Mix of heather, trees and gorse amongst heathland vegetation	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined. >50% heather, <25 trees/ha and 5-25% scrub of 0.5-3m overall.
Heathland and woodland	Nightjar	Food availability	Abundance of night-flying insects	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined . Including e.g. moths, beetles
	Nightjar	Vegetation characteristics	Open ground with predominantly low vegetation (feeding), bare patches (nesting) and sparse woodland/scrub cover (feeding, roosting)	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined . Vegetation mostly of 20-60cm with frequent bare patches of >2sq.m, 10-20% bare ground and <50% tree/scrub cover overall
	Woodlark	Food availability	Abundance of ground surface invertebrates	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined. Including e.g. spiders, weevils, caterpillars
	Woodlark	Vegetation characteristics	Mix of shrub/tree cover (display), short-medium vegetation and bare ground (feeding, nesting, roosting)	No significant decrease from reference level	Methodology for assessing target to be determined. Reference level to be determined

					Frequent bare patches of <0.5ha within mosaic of short(<5cm) to medium(10-20cm) ground vegetation, and small clumps of shrubs or trees
Heathland and woodland	Nightjar, Dartford Warbler, Woodlark	Disturbance	Reduction or displacement of birds	No significant displacement of birds attributable to human disturbance in relation to reference level.	Methodology for assessing target to be determined. Reference level to be determined
	Nightjar, Dartford Warbler, Woodlark	Extent and distribution of habitat	Area	No significant decrease from reference level	Reference level to be determined

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