

Appendix 3

Thames Basin Heaths SPA citation documents

SPA review documents for Thames Basin Heaths SPA

SPA Conservation Objectives

**Favourable Condition Tables and advice on Operations at
Thames Basin Heaths SPA**

**SSSI citations for Bramshill SSSI or Castle Bottom to Yateley &
Hawley Commons SSSI**

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type 1.2 Site code

1.3 Compilation date 1.4 Update

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s)

1.7 Site name

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	200503
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	latitude
00 44 18 W	51 22 18 N

2.2 Site area (ha) 2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK521	Berkshire	16.10%
UK561	Hampshire	30.65%
UK532	Surrey	53.25%

2.6 Biogeographic region

Alpine

Atlantic

Boreal

Continental

Macaronesia

Mediterranean

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

Code	Species name	Population			Site assessment				
		Resident	Migratory		Population	Conservation	Isolation	Global	
			Breed	Winter					Stage
A224	<i>Caprimulgus europaeus</i>		264 M			B		C	
A246	<i>Lullula arborea</i>		149 P			B		C	
A302	<i>Sylvia undata</i>		445 P			A		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	0.6
Bogs. Marshes. Water fringed vegetation. Fens	4.9
Heath. Scrub. Maquis and garrigue. Phygrana	44.0
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	7.0
Coniferous woodland	34.2
Evergreen woodland	
Mixed woodland	3.6
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	5.7
Total habitat cover	100%

4.1 Other site characteristics

Soil & geology:

Acidic, Alluvium, Clay, Nutrient-poor, Sand, Sedimentary

Geomorphology & landscape:

Lowland

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

<i>Caprimulgus europaeus</i>	7.8% of the GB breeding population Count mean (RSPB 1998-99)
<i>Lullula arborea</i>	9.9% of the GB breeding population Count as at 1997 (Wotton & Gillings 2000)
<i>Sylvia undata</i>	27.8% of the GB breeding population Count as at 1999 (RSPB)

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

4.3 Vulnerability

The mosaic of habitats which form the internationally important lowland heathland are dependent on active heathland management. Lack of grazing and other traditional management practices therefore pose a threat. Traditional management is being implemented through schemes such as Countryside Stewardship and Wildlife Enhancement Scheme. Development pressure on neighbouring land and the cumulative and indirect effects of neighbouring developments also pose a potential long-term problem. Housing developments are particularly relevant in this part of south-east England. This has been addressed through English Nature commenting on planning applications and providing input to structural and local plans. A strategic approach to accommodating development whilst ensuring compatibility with the Habitats Regulations is being addressed through the Thames Basin Heaths Area Based Delivery Project.

Tenure is a mixture of public bodies, private landowners, local authorities and non-governmental organisations. The Ministry of Defence are significant landowners/managers. At present the MoD land is used principally for firing ranges and military exercises (predominantly on foot). A significant proportion of the site is local authority-owned land. The local authority land is often designated as Public Open Space and is heavily used for informal recreation. For the smaller private ownerships, conservation management has been addressed through the Site Management Statement process.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK01 (NNR)	6.5
UK04 (SSSI/ASSI)	100.0

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[Home](#) > [UK](#) > [Protected Sites](#) > [Special Protection Areas](#) > [SPA Review](#) > SPA Review site accounts

SPA description

(information as published 2001)

Thames Basin Heaths

Country	England
Unitary Authority	Bracknell Forest, Hampshire, Surrey
SPA status	not yet available
Latitude	15 18 18 N
Longitude	00 45 06 W
SPA EU code	UK9012141
Area (ha)	to be confirmed upon site classification
Component	Ash to Brookwood Heaths
SSSI/ASSIs	Bourley and Long Valley Bramshill Broadmoor to Bagshot Woods and Heaths Castle Bottom to Yatley and Hawley Commons Chobham Common Colony Bog and Bagshot Heaths Eelmoor Marsh Hazeley Heath Horsell Common Ockham and Wisley Commons Sandhurst to Owlsmoor Bogs and Heaths Whitmoor Common



The Thames Basin Heaths SPA is a composite site that is located across the counties of Surrey, Hampshire and Berkshire in southern England. The open heathland habitats overlie sand and gravel sediments which give rise to sandy or peaty acidic soils, supporting dry heathy vegetation on well-drained slopes, wet heath on low-lying shallow slopes and bogs in valleys. The site consists of tracts of heathland, scrub and woodland, once almost continuous, but now fragmented into separate blocks by roads, urban development and farmland. Less open habitats of scrub, acidic woodland and conifer plantations dominate, within which are scattered areas of open heath and mire. The site supports important breeding populations of a number of birds of lowland heathland, especially Nightjar *Caprimulgus europaeus* and Woodlark *Lullula arborea*, both of which nest on the ground, often at the woodland/heathland edge, and Dartford Warbler *Sylvia undata*, which often nests in gorse *Ulex* sp. Scattered trees and scrub are used for roosting.

Together with the nearby Wealden Heaths SPA and Ashdown Forest SPA, the Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations.

Qualifying species

For individual species accounts visit the [Species Accounts section](#)

This site qualifies under **Article 4.1** of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

During the breeding season;

Dartford Warbler *Sylvia undata*, 445 pairs representing at least 27.8% of the breeding population in Great Britain (Count as at 1999)

Nightjar *Caprimulgus europaeus*, 264 pairs representing at least 7.8% of the breeding population in Great Britain (Count mean (1998-99))

Woodlark *Lullula arborea*, 149 pairs representing at least 9.9% of the breeding population in Great Britain (Count as at 1997)

Note:

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

Conservation objectives and definitions of favourable condition for designated features of interest



These Conservation Objectives relate to all designated features on the SSSI, whether designated as SSSI, SPA, SAC or Ramsar features.

Government Buildings
Coley Park
READING RG1 6DT

Name of Site of Special Scientific Interest (SSSI)	
Bramshill	
Names of designated international sites	
Special Area for Conservation (SAC)	
Special Protection Area (SPA)	Thames Basin Heaths
Ramsar	
Relationship between site designations	
Not all of the SSSI is included in the Thames Basin Heaths SPA – unit 4 is excluded from the SPA.	

Version control information		
Status of this Version	Consultation draft	
Prepared by	Andy Gordon (July 2007), edited and Odonata & Invertebrates added by Ben Hibbins (March 2008) & further amendments by Graham Steven following field testing.	
Date of this version	March 2010	
Date of generic guidance on favourable condition used	Template assembly spreadsheet October 2006.	
Other notes/version history	Approach to the bird interest feature was guided by reference to the Natural England research report Review of Bird SSSIs in England, 2008.	
Quality assurance information		
Checked by	Name: Graham Steven	Date 06 April 2010
	Signature 	

Conservation Objectives and definitions of Favourable Condition: notes for users

Conservation Objectives

SSSIs are notified because of specific biological or geological features. Conservation Objectives define the desired state for each site in terms of the features for which they have been designated. When these features are being managed in a way which maintains their nature conservation value, then they are said to be in 'favourable condition'. It is a Government target that 95% of the total area of SSSIs should be in favourable condition by 2010.

Definitions of Favourable Condition

The Conservation Objectives are accompanied by one or more habitat extent and quality definitions for the special interest features at this site. These are subject to periodic reassessment and may be updated to reflect new information or knowledge; they will be used by Natural England and other relevant authorities to determine if a site is in favourable condition. The standards for favourable condition have been developed and are applied throughout the UK.

Use under the Habitats Regulations

The Conservation Objectives and definitions of favourable condition for features on the SSSI may inform the scope and nature of any 'appropriate assessment' under the Habitats Regulations. An appropriate assessment will also require consideration of issues specific to the individual plan or project. The habitat quality definitions do not by themselves 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. Natural England 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 paragraph 20 of ODPM Circular 06/2005 (DEFRA Circular 01/2005) 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.

The formal Conservation Objectives for European Sites under the Habitats Regulations are in accordance with paragraph 17 of ODPM Circular 06/2005 (DEFRA Circular 01/2005), the reasons for which the European Site was classified or designated. The entry on the Register of European Sites gives the reasons for which a European Site was classified or designated.

Explanatory text for Tables 2 and 3

Tables 2, 2a and 3 set out the measures of condition which we will use to provide evidence to support our assessment of whether features are in favourable condition. They are derived from a set of generic guidance on favourable condition prepared by Natural England specialists, and have been tailored by local staff to reflect the particular characteristics and site-specific circumstances of individual sites. Quality Assurance has ensured that such site-specific tailoring remains within a nationally consistent set of standards. The tables include an audit trail to provide a summary of the reasoning behind any site-specific targets etc. In some cases the requirements of features or designations may conflict; the detailed basis for any reconciliation of conflicts on this site may be recorded elsewhere.

Conservation Objectives

The Conservation Objectives for this site are, subject to natural change, to maintain the following habitats and geological features in favourable condition (*), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar) as individually listed in Table 1.

Habitat Types represented (Biodiversity Action Plan categories)

Coniferous woodland/lowland heath
Standing open water

Geological features (Geological Site Types)

(*) or restored to favourable condition if features are judged to be unfavourable.

Standards for favourable condition are defined with particular reference to the specific designated features listed in Table 1, and are based on a selected set of attributes for features which most economically define favourable condition as set out in Table 2, Table 2a and Table 3

Table 1 Individual designated interest features

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI designated interest features	SAC designated interest features	SPA bird populations dependency on specific habitats			Ramsar criteria applicable to specific habitats				
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 2000 waterfowl	3c 1% of population	
Conifer plantation Lowland heath and mire	Aggregations of breeding birds associated with rotational clearings in plantation woodland	Annex I Breeding birds: Nightjar Woodlark Dartford Warbler	*		*							
Standing open water and canals	Breeding odonata assemblage including <i>Cordulea aenea</i> and <i>Somatochlora metallica</i>	Dragonfly assemblage. 24 spp at time of notification including Nationally Scarce species.	*									
Standing open water and canals	Outstanding invertebrate assemblage type W312 acid mire	Invertebrate assemblage associated with acid pools and valley mire	*									
Neutral grassland Lowland Heath and mire Standing open water	Vascular plant assemblage: <i>Pulicaria dysenterica</i> <i>Pilularia globifera</i> <i>Lycopodiella inundata</i>	Populations of small fleabane, pillwort, marsh clubmoss.	*									

NB. 1. Features where asterisks are in brackets (*) indicate habitats which are not notified for specific habitat interest (under the relevant designation) but because they support notified species. 2. The requirements of species (including SPA bird species) are reflected in the Conservation Objectives for habitat features on which they depend. In some specific situations, direct population measures for species may also be used to provide supporting information to confirm habitat quality measures. 3.

Table 2 Habitat extent objectives

Conservation Objective for habitat extent	To maintain the designated features in favourable condition, which is defined in part in relation to a balance of habitat extents (extent attribute). Favourable condition is defined at this site in terms of the following site-specific standards.	
Extent - dynamic balance	On this site favourable condition requires the maintenance of the extent of each habitat type (either designated habitat or habitat supporting designated species). Maintenance implies restoration if evidence from condition assessment suggests a reduction in extent.	

Habitat Feature (BAP Broad Habitat level, or more detailed level if applicable)	Estimated extent and date of data source/estimate	Site Specific target range and measures	Comments
Acid pools and valley mire	Approx 5.5 ha (based upon 2000 aerial photo)	No net decrease in extent from the established baseline.	Baseline maps showing the boundary of the ponds are available and should be used to assess any changes in extent. It is not essential that ponds remain in their current location; it is the overall extent and the condition of the ponds that are important. Some of the ponds on site are seasonal.
Aggregations of Breeding bird species Woodlark Nighthjar Dartford warbler	Numbers of breeding pairs vary between years according to habitat availability and suitability	Area of habitats that are used by woodlark, nighthjar and Dartford warbler maintained within acceptable limits; losses of 5% or more of any relevant habitat type unacceptable. At least 10% of the woodland plantation in suitable condition* to support the Annex 1 breeding bird assemblage in any 6 year recording cycle.	When sites have designated habitat features the data for assessing this attribute may need to be collected according to the relevant habitat guidance. In these cases additional data may not be needed for this attribute. *Suitable condition means plantation cleared within current year or developing woodland aged 0-5 years, not subject to high levels of disturbance by people or dogs during breeding period.

Audit Trail
Rationale for habitat extent attribute (Include methods of estimation (measures), and the approximate degree of change which these are capable of detecting).
Rationale for site-specific targets (including any variations from generic guidance)
Other Notes
Although this site includes small areas of heath and acid grassland habitats these are not of sufficient special interest to be considered reasons for SSSI designation. But these do contribute to the overall habitat mosaic of value to the breeding birds, the invertebrate assemblage and odonata, and some of the areas may support vascular plants of interest. It is important that a proportion of the site is maintained as open, short vegetation to ensure the site continues to provide suitable conditions for these aspects. Areas of recently cleared and young plantation will contribute to this overall mosaic of habitats.

Table 2a Species population objectives

Conservation Objective for species populations	To maintain the designated species in favourable condition, which is defined in part in relation to their population attributes. Favourable condition is defined at this site in terms of the following site-specific standards.
Population balance	On this site favourable condition requires the maintenance of the population of each designated species or assemblage. Maintenance implies restoration if evidence from condition assessment suggests a reduction in size of population or assemblage.

Species feature	Supporting BAP Broad Habitats	Population Attribute	Site specific target range and measures	Comments
Aggregation of breeding bird species: Woodlark	Lowland heathland/ conifer plantation	Population size	Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 16 pairs (14 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.	Records from reliable sources can be used if they date from within 3 years of assessment. Numbers recorded for 2006:30, 2007: 21, 2008: 22
Aggregation of breeding bird species: Nighthjar	Lowland heathland/ conifer plantation	Population size	Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 8 pairs (6 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.	Records from reliable sources can be used if they date from within 3 years of assessment. Numbers recorded for 2006:19, 2007: 20, 2008: 13
Aggregation of breeding bird species: Dartford warbler	Lowland heathland/ conifer plantation	Population size	Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 5 pairs (3 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.	Records from reliable sources can be used if they date from within 3 years of assessment. Numbers recorded for 2006:11, 2007: 11, 2008: 10

<p>Vascular plant assemblage <i>Pulicaria dysenterica</i> <i>Pilularia globifera</i> <i>Lycopodiella inundata</i></p>	<p>Neutral grassland, standing open water, conifer plantation, valley mire</p>	<p>Presence/absence</p>	<p>Species should be present</p>	<p>If other targets are met but the species cannot be found consult the botanical specialists. <i>Pulicaria dysenterica</i> is confined to one place on site. Its location is mapped. This species can be ephemeral and can survive in the seed bank for long periods.</p>
<p>Outstanding invertebrate assemblage W31 permanent wet mire</p>	<p>Acid pools and valley mire</p>	<p>Direct Monitoring of assemblage score based on presence/absence of specified proportion of species typical of habitat listed in ISIS.</p>	<p>Site should meet Threshold Quality Score: W312 Acid mire: score = 6</p>	<p>This attribute is to be assessed through specialist survey.</p>
<p><i>Cordulea aenea</i> <i>Somatochlora metallica</i> Outstanding assemblage of breeding odonata</p>	<p>Acid pools and valley mire</p>	<p>Visual assessment</p>	<p>Water bodies in suitable condition to maintain breeding assemblage: 10-40% emergent vegetation in open pools. 30-50% submerged vegetation in shallower <30cm parts of each water body. Parts of pond margins shaded by trees, parts unshaded. Sufficient area of suitable habitat to maintain population</p>	<p>Whilst most odonata require at least some areas of pond margins to be unshaded by surrounding trees <i>Cordulea aenea</i> and <i>Somatochlora metallica</i> generally require water bodies to have shaded margins (ideally 30-60% of margin shaded). Maintenance of areas of sheltered, sunny, open habitat surrounding the ponds is important as this provides feeding, resting and courting areas. Ideally, a structurally diverse mixture of heath, grassland and mire should be maintained surrounding the ponds with scattered scrub or structurally diverse plantation edge to provide shelter.</p>
<p><i>Cordulea aenea</i> <i>Somatochlora metallica</i> Outstanding assemblage of breeding odonata</p>	<p>Condition of foraging habitat - negative indicators: shading</p>	<p>Visual assessment</p>	<p>No net loss of area of suitable foraging habitat Tree/scrub cover less than 75% overall in heath/mire and grassland close to ponds.</p>	<p>The presence of scattered trees and bushes is desirable to provide shelter, basking sites and resting places but cover should not be such that it reduces the extent or species-richness of the heathland, grassland and mire habitats.</p>

Outstanding assemblage of breeding odonata	Standing open water Lowland heathland	Presence/absence of at least threshold number of species	At least 17 species should be confirmed as present within any 3 year period over the site as a whole. It is desirable, but not essential for maintenance of favourable condition, that the particularly notable species <i>Ceragrion tenellum</i> , <i>Cordulea aenea</i> , <i>Somatochlora metallica</i> and <i>Sympetrum sanguineum</i> are present.	Reliable records from sources such as TVERC or British Dragonfly Society can be utilised if from within 3 year cycle. If all other targets are met but the threshold number cannot be found the national invertebrate specialist should be consulted. Breeding is taken to be confirmed or inferred if exuviae or larvae are present, newly emerged individuals are sighted, females ovipositing, or both sexes of same species regularly seen.
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Audit Trail	
Rationale for species population attributes (Include methods of estimation (measures), and the approximate degree of change which these are capable of detecting).	
Rationale for site-specific targets (including any variations from generic guidance)	
Other Notes	
17 species is set as the threshold breeding odonata assemblage size for SSSI selection in Berkshire and Hampshire in the 1989 SSSI Selection Guidelines. Note that in addition to the rare plants noted above the site also supports the uncommon plants <i>Persicaria minor</i> , <i>Apera spica-venti</i> , <i>Elatine hexandra</i> and <i>Eleocharis acicularis</i> . These were formerly classed as Nationally Scarce but are now known to be more widely distributed than thought. Their presence is still of considerable interest and suitable conditions to support the species should be maintained.	

Conservation objectives and definitions of favourable condition for designated features of interest



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Coley Park
Reading, RG1 6DT

Name of Site of Special Scientific Interest (SSSI)	
Castle Bottom to Yateley and Hawley Commons	
Names of designated international sites	
Special Area for Conservation (SAC)	
Special Protection Area (SPA)	Thames Basin Heaths
Ramsar	
Relationship between site designations	
The SPA and SSSI boundaries are the same. The SSSI incorporates Castle Bottom National Nature Reserve.	

Version control information		
Status of this Version	Consultation draft	
Prepared by	Imogen Parker with amendments by Graham Steven	
Date of this version	January 2010	
Date of generic guidance on favourable condition used	Template assembly spreadsheet Dec 2006	
Other notes/version history	Approach to the bird interest feature was guided by reference to the Natural England research report Review of Bird SSSIs in England, 2008.	
Quality assurance information		
Checked by	Name: Graham Steven	Date 14 January 2010
	Signature 	

Conservation Objectives and definitions of Favourable Condition: notes for users

Conservation Objectives

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Definitions of Favourable Condition

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Use under the Habitats Regulations

The Conservation Objectives and definitions of favourable condition for features on the SSSI may inform the scope and nature of any 'appropriate assessment' under the Habitats Regulations. An appropriate assessment will also require consideration of issues specific to the individual plan or project. The habitat quality definitions do not by themselves 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. Natural England will advise on a case by case basis.

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The formal Conservation Objectives for European Sites under the Habitats Regulations are in accordance with paragraph 17 of ODPM Circular 06/2005 (DEFRA Circular 01/2005), the reasons for which the European Site was classified or designated. The entry on the Register of European Sites gives the reasons for which a European Site was classified or designated.

Explanatory text for Tables 2 and 3

Tables 2, 2a and 3 set out the measures of condition which we will use to provide evidence to support our assessment of whether features are in favourable condition. They are derived from a set of generic guidance on favourable condition prepared by Natural England specialists, and have been tailored by local staff to reflect the particular characteristics and site-specific circumstances of individual sites. Quality Assurance has ensured that such site-specific tailoring remains within a nationally consistent set of standards. The tables include an audit trail to provide a summary of the reasoning behind any site-specific targets etc. In some cases the requirements of features or designations may conflict; the detailed basis for any reconciliation of conflicts on this site may be recorded elsewhere.

Conservation Objectives

The Conservation Objectives for this site are, subject to natural change, to maintain the following habitats and geological features in favourable condition (*), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar) as individually listed in Table 1.

Habitat Types represented (Biodiversity Action Plan categories)

Lowland heath
Standing open water

Geological features (Geological Site Types)

n/a

(*) or restored to favourable condition if features are judged to be unfavourable.

Standards for favourable condition are defined with particular reference to the specific designated features listed in Table 1, and are based on a selected set of attributes for features which most economically define favourable condition as set out in Table 2, Table 2a and Table 3

Table 1 Individual designated interest features

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI designated interest features	SAC designated interest features	SPA bird populations dependency on specific habitats			Ramsar criteria applicable to specific habitats				
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 2000 waterfowl	3c 1% of population	
Lowland heath and mire	A range of heath and mire types including NVC types H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-</i> <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-</i> <i>Sphagnum papillosum</i> valley mire	Dry and wet heath and valley mire	*									
Lowland heath and mire	Invertebrate assemblage	F11 unshaded early successional mosaic	*									
Lowland heath and Conifer plantation	Aggregations of breeding Annex 1 birds Woodlark Nightjar Dartford warbler	Breeding aggregations of very rare birds associated with heathland and rotational clearings in woodland	*	*	*	*						
Standing open water	Outstanding odonata assemblage	Breeding dragonfly and damselfly assemblage; 19 species present at time of designation	*									

NB. 1. Features where asterisks are in brackets (*) indicate habitats which are not notified for specific habitat interest (under the relevant designation) but because they support notified species. 2. The requirements of species (including SPA bird species) are reflected in the Conservation Objectives for habitat features on which they depend. In some specific situations, direct population measures for species may also be used to provide supporting information to confirm habitat quality measures. 3.

Table 2 Habitat extent objectives

Conservation Objective for habitat extent	To maintain the designated features in favourable condition, which is defined in part in relation to a balance of habitat extents (extent attribute). Favourable condition is defined at this site in terms of the following site-specific standards.		
Extent - dynamic balance	On this site favourable condition requires the maintenance of the extent of each habitat type (either designated habitat or habitat supporting designated species). Maintenance implies restoration if evidence from condition assessment suggests a reduction in extent.		
Habitat Feature (BAP Broad Habitat level, or more detailed level if applicable)	Estimated extent and date of data source/estimate	Site Specific target range and measures	Comments
Lowland heath and mire	Approx 146 ha based on aerial photo dated 2000 including heath, mire, grass and bracken	No reduction in the total extent of permanent heath and mire (excluding temporary habitat created through rotational forestry management).	The area figure is based upon the extent of open habitat present following habitat restoration work. It is accepted that this is a greater extent than was present when the SSSI was first designated but is the area considered appropriate to ensure that the special interest of the heathland mosaic can be sustained into the future. Further creation of open habitat is desirable through clearance of secondary woodland.
Aggregations of Breeding bird species Woodlark Nighthjar Dartford warbler	Numbers of breeding pairs vary between years according to habitat availability and suitability	Area of habitats that are used by woodlark, nighthjar, and Dartford warbler maintained within acceptable limits; losses of 5% or more of any relevant habitat type unacceptable. At least 10% of the woodland plantation in suitable condition* to support the Annex 1 breeding bird assemblage in any 6 year recording cycle.	When sites have designated habitat features the data for assessing this attribute may need to be collected according to the relevant habitat guidance. In these cases additional data may not be needed for this attribute. *Suitable condition means plantation cleared within current year or developing woodland aged 0-5 years, not subject to high levels of disturbance by people or dogs during breeding period.

Audit Trail

Rationale for habitat extent attribute
(Include methods of estimation (measures), and the approximate degree of change which these are capable of detecting).

Rationale for site-specific targets (including any variations from generic guidance)

The various heathland and mire types present have been combined as they occur as a complex mosaic and it is difficult to detect changes in the relative extent of the habitats. Gross changes due to tree encroachment and fire can be detected using aerial photography.

Other Notes

Table 2a Species population objectives

<p>Conservation Objective for species populations</p>	<p>To maintain the designated species in favourable condition, which is defined in part in relation to their population attributes. Favourable condition is defined at this site in terms of the following site-specific standards.</p>			
<p>Population balance</p>	<p>On this site favourable condition requires the maintenance of the population of each designated species or assemblage. Maintenance implies restoration if evidence from condition assessment suggests a reduction in size of population or assemblage.</p>			
<p>Species feature</p>	<p>Supporting BAP Broad Habitats</p>	<p>Population Attribute</p>	<p>Site specific target range and measures</p>	<p>Comments</p>
<p>Aggregation of breeding bird species: Woodlark</p>	<p>Lowland heathland/ conifer plantation</p>	<p>Population size</p>	<p>Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 15 pairs (12 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.</p>	<p>Records from reliable sources can be used if they date from within 3 years of assessment. Figures for 2006-2009: 22, 18, 18, 13.</p>
<p>Aggregation of breeding bird species: Nightjar</p>	<p>Lowland heathland/ conifer plantation</p>	<p>Population size</p>	<p>Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 15 pairs (21 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.</p>	<p>Records from reliable sources can be used if they date from within 3 years of assessment. Figures for 2006-2009: 7 (incomplete coverage), 20, 17, 19.</p>
<p>Aggregation of breeding bird species: Dartford warbler</p>	<p>Lowland heathland/ conifer plantation</p>	<p>Population size</p>	<p>Maintain population at or above minimum number of breeding pairs recorded within recent years; minimum acceptable number should be 25 pairs (25 breeding pairs recorded at time of designation). Counts or estimates of numbers of breeding individuals, pairs or calling males, occupied breeding sites or occupied territories.</p>	<p>Records from reliable sources can be used if they date from within 3 years of assessment. Figures for 2006-2009: 26, 28, 32, 9.</p>

F111 Sand and chalk (F111 unshaded early successional mosaic)	Lowland heathland/conifer plantation	Direct monitoring of assemblage score based on presence/absence of specified proportion of species typical of habitat listed in ISIS.	Monitor the assemblage once in every 6 year monitoring cycle Using defined invertebrate sampling protocols, thresholds to be met: F111 sand and chalk: threshold score 25 (subject to change following further investigation of invertebrate interest).	This attribute is to be assessed through specialist survey.
Outstanding odonata assemblage	Acid pools and valley mire	Visual assessment	Water bodies in suitable condition to maintain breeding assemblage: 10-40% emergent vegetation in open pools. 30-50% submerged vegetation in shallower <30cm parts of each water body. Parts of pond/mire margins shaded by trees, parts unshaded. Sufficient area of suitable habitat to maintain population No net loss of area of suitable foraging habitat	Whilst most odonata require at least some areas of pond margins to be unshaded by surrounding trees <i>Cordulea aenea</i> and other key species require water bodies to have shaded margins (ideally 30-60% of margin shaded). But for other species maintenance of areas of sheltered, sunny, open habitat surrounding the ponds is important as this provides feeding, resting and courting areas. Ideally, a structurally diverse mixture of heath, grassland and mire should be maintained surrounding the ponds with scattered scrub or structurally diverse plantation edge to provide shelter. It is not essential that all ponds are in ideal condition but there should be representation of water bodies offering a range of habitat conditions appropriate to support the range of species in the breeding assemblage.
Outstanding assemblage of breeding odonata	Standing open water Lowland heathland	Presence/absence of at least threshold number of species	At least 19 species should be confirmed as present within any 3 year period over the site as a whole. It is desirable, but not essential for maintenance of favourable condition, that the particularly notable species <i>Ceriagrion tenellum</i> , <i>Cordulea aenea</i> and <i>Sympetrum sanguineum</i> are present.	Reliable records from sources such as HBIC or British Dragonfly Society can be utilised if from within 3 year cycle. If all other targets are met but the threshold number cannot be found the national invertebrate specialist should be consulted. Breeding is taken to be confirmed or inferred if exuviae or larvae are present, newly emerged individuals are sighted, females ovipositing, or both sexes of same species regularly seen.

Audit Trail
<p style="text-align: center;">Rationale for species population attributes</p> <p>(Include methods of estimation (measures), and the approximate degree of change which these are capable of detecting).</p>
<p style="text-align: center;">Rationale for site-specific targets (including any variations from generic guidance)</p>
<p style="text-align: center;">Other Notes</p>

Table 3 Site-Specific definitions of Favourable Condition

CONSERVATION OBJECTIVE FOR THIS HABITAT	To maintain the dry and wet heath and mire habitats at Castle Bottom to Yateley and Hawley Commons SSSI in favourable condition, with particular reference to relevant specific designated interest features. Favourable condition is defined at this site in terms of the following site-specific standards:
Site-specific details of any geographical variation or limitations (where the favourable condition standards apply)	The attributes below apply in units 1,2,3,5, 7, 8 only but note that parts of some of these units are occupied by conifer plantation and secondary woodland where the attributes do not apply. The attributes for heathland should not be applied in the area occupied by the gravel pit in uni12; this area was included in the SSSI on the understanding that long term restoration to habitat suitable for key heathland bird species is planned. Areas of conifer plantation on Eversley Common, at Yateley Heath Wood and Hawley Common were included in the SSSI on the basis that rotational clearings and open spaces provide habitat for breeding woodlark, nightjar and Dartford warbler. It is not essential for the site to be considered to be in favourable condition for these areas to be cleared to create permanent open heathland. Note that some of the plantation areas are also of value in supporting the odonata assemblage.

Site-specific standards defining favourable condition					
Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation structure of areas of dry heath: growth phase composition for ericaceous spp.	Visual assessment of cover, using structured walk or transects	Presence of heather in all stages of growth, ideally: Pioneer phase (including pseudo-pioneer): 10-40%; Building/mature phase: 20-80%; Degenerate phase: <30%; Dead: <10% of total ericaceous cover.	The overall objective is to have high structural diversity in the heathland and no one growth form should be dominant. But at such a large site it is considered acceptable to have extensive areas of relatively low structural diversity as long as there is appropriate representation of the various growth stages within the heathland block being assessed. The presence of areas of short heather in the dry heath is of particular importance in being preferred areas for breeding woodlark but large areas of short, uniform heath are unsuitable for reptiles.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Extent of bare ground in areas of dry heath	Visual assessment of cover, using structured walk or transects	At least 1% but not more than 10% cover of the area of the dry heath feature should consist of exposed, but not heavily trampled or frequently disturbed, bare ground	Bare ground is of greatest value for invertebrates and reptiles when it forms a patchwork within the vegetation and where present in sheltered, sunny places. Exclude rock, stone, litter or bryophyte/lichen mats. Note also that it is desirable to have a higher proportion of bare ground in those areas of the site which support woodlark and nightjar, particularly where this is in a mosaic with dry heath and woodland margin.	Yes

Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Habitat structure: extent of exposed bare peat in wet heath/mire	Visual estimate of cover.	2- 10% (excluding bog pools).	A high frequency and cover of exposed substrate will usually be undesirable and may indicate, inter alia, over-grazing, but some exposed bare substrate is desirable to provide opportunities for establishment of early successional communities and in suitable locations will provide habitat favoured by woodlark.	yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Indicators of local distinctiveness: e.g. transitions, pools or notable species. Discretionary attribute.	As appropriate to feature.	Areas of dry heath in core Annex 1 bird area (this may move around the site according to prevailing habitat structure) in suitable condition for breeding woodlark. Suitable habitat conditions present to support breeding nightjar. Suitable habitat present to support breeding Dartford warbler. Suitable habitat conditions present to support adder and common lizard. Suitable habitat conditions present to support breeding silver-studded blue butterfly. Populations of notable plants at least maintained: <i>Lycopodiella inundata</i> & <i>Botrychium lunaria</i>	The continued presence of breeding woodlark is essential for the maintenance of favourable condition of the SPA. Woodlarks prefer a mosaic of short (<5 cm) to medium (10-20 cm) ground vegetation, small clumps of shrubs & trees and frequent bare patches. Important prey items include spiders, weevils and caterpillars.	yes
				Silver-studded blue is present in various parts of the site. It requires short, grassy vegetation in areas of dry heath. The population of <i>Lycopodiella inundata</i> at this site was one of the largest in Hants at time of designation. It requires short, open vegetation with bare peat in wet heath.	

Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex</i> <i>minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation composition: bryophyte cover	Visual assessment of cover, using structured walk or transects	> 10% cover of <i>Sphagna</i> in areas of M25/M21 wet heath/mire	Cover of <i>sphagna</i> above target is a good indicator of adequate water supply and suitable management conditions to maintain high biodiversity.	No
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: Shrubs	Visual assessment	<5% cover overall of <i>Ulex europaeus</i>	Gorse species support a rich invertebrate and vertebrate fauna. However, they can affect the soil characteristics and may have damaging impacts.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation composition: frequency of dwarf shrubs	Visual assessment of cover, using structured walk or transects	At least two species of dwarf shrubs present and at least frequent throughout the open heath. Dwarf-shrubs include <i>Calluna vulgaris</i> , <i>Erica cinerea</i> , <i>E. tetralix</i> , <i>Ulex minor</i> , <i>Vaccinium myrtillus</i> .		Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex minor</i> heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation structure: cover of dwarf shrubs	Visual assessment of cover, using structured walk or transects	Dwarf shrub cover 40-90% in the open heath and mire (excluding bog pools).	This target should be applied in the areas of dry and wet heath. It is accepted that there are areas where grasses predominate where it may be inappropriate to apply the target.	Yes

Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex minor</i> heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation structure: litter	Visual estimate of litter cover.	Total extent in the features of interest should be no more than 25% cover.	More than 25% litter cover indicates insufficient grazing. Excessive litter accumulation can result in loss of low growing plants. But note that the retention of some litter is important for invertebrates and reptiles including through the winter months for shelter, feeding habitat, basking and hibernation sites. Litter around <i>Molinia</i> tussocks can be of particular value.	yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex minor</i> heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation composition: grasses, sedges, rushes	Visual assessment of cover, using structured walk or transects	At least 1 species at least frequent and 2 species at least occasional throughout the heath and mire. These may include <i>Carex panicea</i> , <i>Carex binervis</i> , <i>Eleocharis</i> spp., <i>Eriophorum angustifolium</i> , <i>Juncus acutiflorus</i> , <i>Juncus articulatus</i> , <i>Molinia caerulea</i> , <i>Rhynchospora alba</i> .	It is desirable that grasses and sedges continue to be a prominent component of the heath/mire mosaic. But a trend of decreasing cover of ericaceous species and increasing dominance by grasses and rushes may indicate excessive grazing, nutrient enrichment, or damage by fire and should be interpreted as indicating unfavourable condition. Note that <i>Molinia caerulea</i> is prominent in large parts of this site. High cover and frequency of <i>Molinia</i> is not necessarily a problem as long as sward height is generally low and it is not allowed to out-compete other species, but should be <50%.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex minor</i> heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Vegetation composition: desirable forbs	Visual assessment of cover, using structured walk or transects	At least 2 species at least occasional throughout the open heath/mire. Desirable forbs include: <i>Anagallis tenella</i> , <i>Drosera</i> spp., <i>Galium saxatile</i> , <i>Genista anglica</i> , <i>Myrica gale</i> , <i>Narthecium ossifragum</i> , <i>Polygala serpyllifolia</i> , <i>Potentilla erecta</i> , <i>Succisa pratensis</i> .	These species will generally indicate good habitat conditions.	Yes

Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex</i> minor heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: Species	Visual assessment, using structured walk or transects	<1% exotic species such as <i>Rhododendron ponticum</i> , <i>Gaultheria shallon</i> , <i>Fallopia japonica</i> in the open heath/mire.	Exotic species should be eradicated if possible.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex</i> minor heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: Species	Visual assessment	<5% cover of bracken (forming a dense canopy) in the open heath/mire	Bracken can be beneficial for a range of invertebrates and may provide cover and basking sites for reptiles; it should only be considered an indicator of unfavourable condition if exceeding the target.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex</i> minor heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: "weeds"	Visual assessment	< 1% ragwort, nettle, thistles and other herbaceous spp in the open heath/mire including <i>Cirsium arvense</i> , <i>Digitalis purpurea</i> , <i>Glyceria fluitans</i> , <i>Juncus effusus</i> , <i>J. squarrosus</i> , <i>Oenanthe crocata</i> , <i>Phragmites australis</i> , <i>Ranunculus repens</i> , <i>Senecio jacobaea</i> , <i>Rumex obtusifolius</i> , <i>Typha</i> spp., <i>Urtica dioica</i> .	Species in this list may indicate excessive disturbance and/or nutrient input.	Yes
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris</i> - <i>Ulex</i> minor heath, M16 <i>Erica tetralix</i> - <i>Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum</i> - <i>Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: Species	Visual assessment	< 10% tree & shrub (excluding <i>Ulex</i>) cover in the open heath/mire.	It is accepted that the retention of scattered areas of established woodland is necessary as a means of managing public access and to provide visual buffers around the margins, and that it is desirable to retain patches of secondary woodland and scrub to provide suitable habitat structure for nightjar. The retention of scattered mature trees in the open heath may be of value in providing resting sites for birds.	Yes

Criteria feature	Attribute	Measure	Target	Comments	Use for CA?
Lowland dwarf shrub heath including H2 <i>Calluna vulgaris-Ulex</i> minor heath, M16 <i>Erica tetralix-Sphagnum compactum</i> wet heath, M25 <i>Molinia caerulea – Potentilla erecta</i> mire & M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> valley mire and transitional habitats	Negative indicators: signs of disturbance	Visual assessment, using structured walk or transects	<1% of habitat showing signs of trampling/paths/disturbance/ burning	Clear indications of damage or disturbance in areas of established heath may be considered significant damage but discretion is required as limited disturbance to re-establish the early successional phase may be desirable. Do not apply to those areas used routinely for military training where there is frequent disturbance by vehicles.	Yes

Audit Trail

Rationale for limiting standards to specified parts of the site

Rationale for site-specific targets (including any variations from generic guidance)

A higher than usual upper limit for scrub cover is set given the importance of scattered scrub to support the key breeding bird species.

Rationale for selection of measures of condition (features and attributes for use in condition assessment)

(The selected vegetation attributes are those considered to most economically define favourable condition at this site for the broad habitat type and any dependent designated species).

Other Notes

Operations likely to damage the special interest

**Site name: Castle Bottom to Yateley and Hawley Commons, Hampshire
OLD1006836**

Ref. No. Type of Operation

- 1 Cultivation, including ploughing, rotovating, harrowing, and re-seeding.
- 2 Grazing and changes in the grazing regime (including type of stock, intensity or seasonal pattern of grazing).
- 3 The introduction of stock feeding and alterations to stock feeding practice.
- 4 Mowing or cutting vegetation, the introduction of mowing and alterations to the mowing or cutting regime.
- 5 Application of manure, slurry, liquor, fertilisers and lime.
- 6 Application of pesticides, including herbicides (weedkillers) whether terrestrial or aquatic, and veterinary products.
- 7 Dumping, spreading or discharge of any materials.
- 8 Burning and alterations to the pattern or frequency of burning.
- 9 The release into the site of any wild, feral, captive bred or domestic animal*, plant, seed or micro-organism (including genetically modified organisms).
- 10 Killing, injuring, taking or removal of any wild animal*, (including dead animals or parts thereof), or their eggs and nests, including pest control and disturbing them in places of shelter.
- 11 Destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf and peat.
- 12 Tree and/or woodland management+ and alterations to tree and/or woodland management+.
- 13a Drainage (including the use of moor gripping, the use of mole, tile, tunnel or artificial drains).
- 13b Modification of the structure of watercourses (rivers, streams, springs, ditches, dykes, drains), including their banks and beds, as by re-alignment, re-grading and dredging.
- 14 Alterations to water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes). Also the modification of current drainage operations.
- 15 Infilling or digging of ditches, dykes, drains, marshes and ponds.
- 20 Extraction of minerals, including peat, sand and gravel, topsoil, subsoil, chalk and spoil.
- 21 Destruction, construction, removal, rerouting or regrading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and soft rock exposures or the laying, maintenance or removal of pipelines and cables, above or below ground.
- 22 Storage of materials.
- 23 Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- 26 Use of vehicles.
- 27 Recreational activities.
- 28 Game management and hunting practices and alterations to game management and hunting practice.

* 'animal' includes any mammal, reptile, amphibian, bird, fish or invertebrate.

+ including planting, felling, pruning and tree surgery, thinning, coppicing, changes in species composition, removal of fallen timber.

County: Hampshire

Site name: Bramshill

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 (as amended)

Local Planning Authority: Hampshire County Council, Hart District Council

National grid reference: SU774596

Ordnance survey sheet: 1:50,000: 186

1:10,000: SU76 SE/SW, SU75 NE

Date notified (under 1981 Act): 1988, 1990

Date of last revision: 20.10.2000

Area: 671.99 ha

Date of Confirmation: 17.7.2001

Reasons for Notification

This site is notified for a series of shallow acid ponds and associated mire, which support a rich assemblage of dragonfly and damselfly, and rotationally felled conifer plantation, which provides habitat for internationally important populations of nightjar, woodlark and Dartford warbler.

General Description

Bramshill comprises extensive areas of conifer plantation together with a series of shallow acidic ponds within relic wet heathland and a small unimproved grassland area adjacent which provides habitat for the nationally rare small fleabane *Pulicaria vulgaris*.

Management of the pine plantations results in a sequence of clearings and young coniferous trees which are utilised by breeding nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea* and Dartford warbler *Sylvia udnata*. The site also contains small breeding populations of hobby *Falco subbuteo* and little ringed plover *Charadrius dubius*

The pond areas differ in character, the northern and middle areas occupying former gravel workings, whilst the southern series occupies a damp valley and was formed by damming a small acidic stream. The areas of open water are dominated by bog pondweed *Potamogeton polygonifolius* and very large populations of the nationally scarce pillwort *Pilularia globulifera*. The shallow, often exposed margins have a rich flora dominated by soft rush *Juncus effuses*, compact rush *J. conglomerates*, lesser spearwort *Ranunculus flammula* and reedmace *Typha latifolia*. Nationally scarce plants occurring here include the needle spike rush *Elecharis acicularis*, six stamened waterwort *Elatine hexandra* and small water-pepper *Persicaria minor*.

Within the plantations there are a few small areas of wet heath dominated by purple moor-grass *Molinia caerulea*, wet heathland with cross leaved heath *Erica tetralix* and fragments of dry heathland with heather *Calluna vulgaris*. Locally uncommon plants present include petty whin *Genista anglica* and small cudweed *Filago minima*, together with stag's horn clubmoss *Lycopodium clavatum* at its only Hampshire location. Heath communities are present alongside forest tracks and briefly recolonise after forestry clearance operations, before the

tree cover closes over again following planting. Yellow bartisia *Parentucellia viscosa* is found along some woodland rides.

The acidic ponds are fed by the surrounding heathland and are generally clear and free of pollution. At least 24 species of dragonfly and damselfly have been recorded breeding out of a total of 37 resident in Britain. The occurrence of the nationally scarce small red damselfly *Ceragrion tenellum*, downy emerald *Cordulia aenea* and brilliant emerald *Somatochlora metallica* are of particular note. The open water and heathland areas are also important for other invertebrates, including the nationally scarce horsefly *Tabanus cordiger*, woodland grasshopper *Omocestrus rufipes* and a colony of the shortwinged conehead *Conocephalus dorsalis*.

Two unimproved grassland fields close to Springwater Farm lie adjacent to the northern plantation at Bramshill. Extensive grazing has created habitat for a population of the nationally rare small fleabane *Pulicaria vulgaris*, which is also vulnerable in a European context. This is the only site in Hampshire which supports this plant, outside the New Forest.

Other Information

1. This site incorporates two areas previously notified as Bramshill SSSI and Warren Heath Ponds SSSI with extensions to incorporate coniferous plantation which provide habitat for Annex I birds.
2. This site includes land which has been proposed for designation as a Special Protection Area under Directive 79/409/EEC on the Conservation of Wild Birds. Nightjar, woodlark and Dartford warbler are listed on Annex 1 of the Directive.
3. Woodlark and nightjar are priority species in the UK Biodiversity Action Plan.
4. Woodlark, Dartford warbler, hobby and little ringed plover are specially protected by being listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
5. Small fleabane is a Red Data book species listed on Schedule 8 of the Wildlife and Countryside Act.

County: Hampshire **Site name:** **Castle Bottom to Yateley and Hawley Commons**

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 (as amended after 1981)

Local Planning Authorities: Hampshire County Council, Hart District Council, Rushmoor Borough Council

National grid reference: SU834588

Ordnance Survey sheet: 1:50,000: 175,186 **1:10,000:** SU85 NW, SU85NE, SU86 SW, SU76 SE

Date notified (under 1949 Act): 1979 (Yateley Common)

Date notified (under 1981 Act): 1985, 1986, 1993

Date of last revision: 20 October 2000

Area: 921.41 ha

Reasons for notification

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

General description

Castle Bottom to Yateley and Hawley Commons is one of the largest remnants of lowland heathland in the Thames Basin. The majority of the site is on gently undulating plateau gravels; the valley bog at Castle Bottom is underlain by Bagshot Beds and Bracklesham Sands.

The dry heathland areas are dominated by heather *Calluna vulgaris*, bell heather *Erica cinerea* and dwarf gorse (*flex minor*, grading locally to humid heath dominated by heather, bell heather, cross-leaved heath *Erica tetralix* and purple moor-grass *Mohnia caerulea*, or acid grassland with dense bracken *Pteridium aquilinum*. Gorse *Ulex europaeus*, silver birch *Betula pendula* and pine *Pinus sylvestris* scrub form part of the mosaic. Small areas of grass heath are dominated by bristle-leaved bent grass *Agrostis curtisii*, here near the eastern limit of its distribution. The nationally scarce upright chickweed *Moenchia erecta* is found together with the largest Hampshire colony of the locally uncommon moonwort fern *Botrychium lunaria*. The locally uncommon meadow thistle *Cirsium dissectum* is found towards the south westerly end of the site.

Valley mire vegetation at the site is dominated by tussocky purple moor-grass and bog myrtle *Myrica gale*. The rich bog flora associated with the more open areas includes white

beak-sedge *Rhynchospora alba*, two species of sundew *Drosera rotundifolia* and *D. intermedia*, dodder *Cuscuta epithymum*, bog asphodel *Narthecium ossifragum* and bog pimpernel *Anagallis tenella*.

The site supports at least 19 species of dragonfly and*damselfly out of a total of 37 resident species in Britain. These include two nationally scarce species, the small red damselfly *Ceragrion tenellum* and the downy emerald *Cordulia aenea*, both associated with bog. Heathland invertebrates include the nationally rare bee *Hyaeus gibbus* and a number of nationally scarce species including two native cockroaches, the dusky cockroach *Ectobius lapponicus* and lesser cockroach *E. panzeri*, and the silver-studded blue butterfly *Plebejus argus*. The nationally rare conopid fly *Myopa fasciata* is recorded from the scrub/heath interface.

The mosaic of open heath, young plantings and broad rides within coniferous plantation, and scrub provides habitat for a number of heathland birds. These include stonechat *Saxicola torquata* together with three highly vulnerable species of bird, woodlark *Lullula arborea*, nightjar *Caprimulgus europaeus* and Dartford warbler *Sylvia undata*. The site is also a regular feeding habitat for the hobby *Falco subbuteo*.

Other information

1. Part of this site is a Country Park and part is registered and confirmed common land.
2. This site includes land which has been proposed for designation as a Special Protection Area under Directive 79/409/EEC on the Conservation of Wild Birds. Nightjar, woodlark and Dartford warbler are listed on Annex 1 of the Directive.
3. Woodlark and Dartford warbler are specially protected by being listed in Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
4. Woodlark, nightjar and hobby are priority species in the UK Biodiversity Action Plan.
5. Lowland heath is a priority habitat in the UK Biodiversity Action Plan.