

COUNTY: SURREY SITE NAME: COLONY BOG & BAGSHOT HEATH

BOROUGHS: SURREY HEATH, GUILDFORD, WOKING

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and

Countryside Act 1981.

Local Planning Authorities: SURREY HEATH BOROUGH COUNCIL, GUILDFORD

BOROUGH COUNCIL, WOKING BOROUGH COUNCIL

National Grid References: SU 930 590 Area: 1127.3 ha (2785.6 acres)

SU 913 619

Ordnance Survey Sheets 1:50,000: 186 1:10,000: SU 95 NW, SU 96 SW

Date Notified (under 1949 Act): 1975 Date of Last Revision: -

Date Notified (under 1981 Act): 1988 Date of Last Revision: -

Other Information: This site includes much of Lightwater Country Park, managed by Surrey Heath

Borough Council. Much of the remainder of the site is within a military Danger Area where high explosives are regularly used, and where there is no public access. The site is listed in 'A Nature Conservation Review'.* The site forms part of Thames Basin Heaths proposed Special Protection Area for Birds (pSPA), proposed for the designation under European Commission Directive 79/409 on the

Conservation of Wild Birds (the Birds Directive).

Reasons for Notification:

Colony Bog and the associated complex of bog, wet and dry heath and other habitats within this site form one of the finest surviving tracts of predominately wet heathland in south east England, as well as being the largest in the London Basin. Also included is some rich unimproved grassland. A large part of the site is military land, and a separate block to the north is managed as a Country Park. The wide range of habitats within the site support a rich variety of plants and animals, including county and national rarities, many of which are dependent on high quality heathland or bog for their survival. The site supports many characteristic heathland birds, including strong breeding populations of nightjar *Camprimulgus europaeus*, woodlark *Lullula arborea*, and Dartford warbler *Sylvia undata*, all birds listed on Annex 1 of the Birds Directive.

The limited and dangerous access to much of this site means that relatively little is known of the rare plants and animals. However, even from the recording that has been possible, many specialised and restricted species are known to occur. Open heathland has been part of the Surrey landscape for thousands of years, during which time traditional grazing and gathering of brushwood and bracken maintained its character. Western Surrey was, at one time largely covered by these open habitats, but drainage and development for intensive agriculture, forestry, housing and roads have severely reduced their extent. Much of this site has been protected from development by its use as military land, but in common with much heathland and downland, it is no longer grazed by stock, and many areas are now threatened by becoming overgrown with scrub and woodland.

The western margin of the site follows the east-facing escarpment of Chobham Ridges, where the soil is dry, acidic and sandy, derived from the Barton Beds locally overlain by plateau gravels. These beds also underlie the central part of the site, where they are often waterlogged and overlain with deep peat, as are the Bracklesham Beds in the east.

Bogs and wet heathland

Where the ground within the site is waterlogged, a layer of peat has built up from the partly decomposed remains of plants. On slightly sloping ground a thin layer of peat supports wet heathland, dominated by cross-leaved heath Erica tetralix, purple moor-grass Molinia caerulea, deer-grass Trichophorum cespitosum and bog-moss Sphagnum compactum. Other plants include ling Calluna vulgaris, tormentil Potentilla erecta, mat-grass Nardus stricta and the nationally scarce marsh club-moss Lycopodiella inundata. In hollows and valley bottoms wet heathland grades into valley mires (bogs), where a thick layer of peat has built up over thousands of years. The most important of these are Colony Bog itself, Lightwater, Hagthorne, Folly and Great Bottom Bogs. The bog surface is covered with a spongy mass of bog-mosses Sphagnum papillosum and S. capillifolium, amongst which a diverse bog flora grows, dominated by bog asphodel Narthecium ossifragum, purple moor-grass, common cotton-grass Eriophorum angustifolium and bog myrtle Myrica gale. Other plants include round-leaved sundew Drosera rotundifolia, meadow thistle Cirsium dissectum, devil's-bit scabious Succisa pratensis, sharp-flowered rush Juncus acutiflorus, heath spotted orchid Dactylorhiza maculata, and at least ten species of bog mosses Sphagnum spp. Bog pools add valuable diversity, and support long-leaved sundew Drosera intermedia, bog pimpernel Anagallis tenella, the large raft spider Dolomedes fimbriatus and provide breeding sites for damselflies and dragonflies (Odonata). The bogs support many county rarities, including early marsh orchid Dactylorhiza incarnata, lesser butterfly orchid Platanthera bifolia, flea sedge Carex pulicaris, brown sedge C. disticha, dioecious sedge C. dioica, hare's-foot cotton-grass Eriophorum vaginatum, white beak-sedge Rhynchospora alba, a scarce hybrid horsetail Equisetum Xlitorale, the mosses Campylopus brevipilus and C. pyriformis, and the scarce bog-mosses Sphagnum molle and S. magellanicum. In some areas, such as Lightwater and Folly Bogs, calcium-enriched ground water provides suitable conditions for bog-rush Schoenus nigricans, and calcium-enriched pools at map reference SU 919 602 support few-flowered spike-rush Eleocharis quinqueflora, the moss Drepanoclados revolvens and the only known south eastern England colony of the moss Scorpidium scorpidioides.

Dry heathland

The dry, acidic sandy soils of the higher ground within the site support dry heath and grass-heath, dominated by ling Calluna vulgaris, dwarf furze Ulex minor, bell heather Erica cinerea and grasses including mat-grass Nardus stricta, sheep's fescue Festuca ovina, wavy hair-grass Deschampsia flexuosa, purple moor-grass Molinia caerulea, sweet vernal grass Anthoxanthum odoratum and common bent Agrostis capillaris, which is mixed with or replaced by bristle bent A. curtisii in the east and north of the site. Other plants include petty whin Genista anglica, pill sedge Carex pilulifera, heath milkwort Polygala serpyllifolia, heath bedstraw Galium saxatile, squirrel-tail fescue Vulpia bromoides (beside tracks), bilberry Vaccinium myrtillus, tormentil Potentilla erecta, dodder Cuscuta epithymum, and bracken Pteridium aquilinum, which in many places forms extensive stands. The scarce orb web spiders Neoscona adiantum and Tetragnatha striata, and the rare heathland spider Oxyopes heterophthalamus have been recorded within the site.

A number of rifle ranges are kept mown, maintaining short heather and grass-heath which provide valuable diversity and form ideal habitat for short-heath plants and animals.

Woodland and scrub

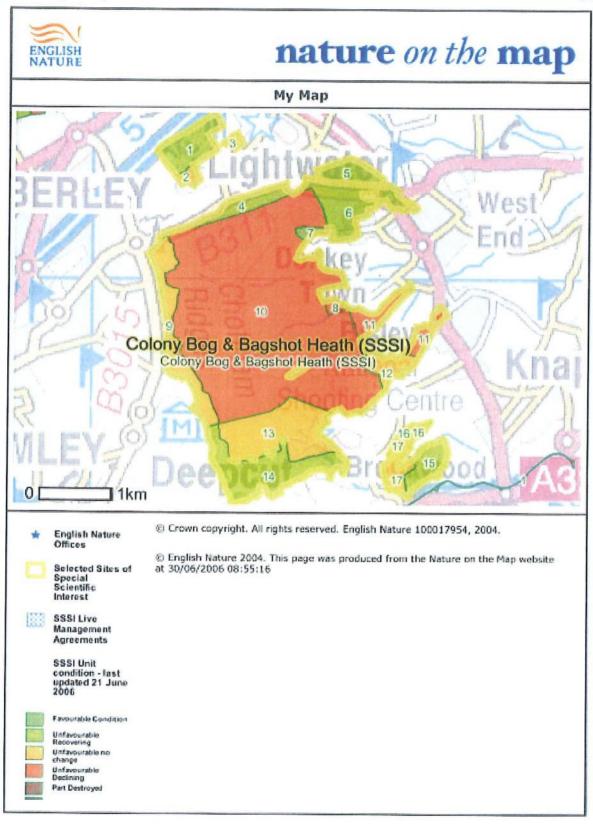
Lack of grazing or other management on many parts of the site is leading to progressive over-growth by scrub, which eventually develops into secondary woodland. On very dry heath areas dense colonies of bracken spread, and seedlings of silver birch *Betula pendula* and Scot's pine *Pinus sylvestris* become established. These eventually shade out the heathland plants, forming, together with oak *Quercus robur* and holly *Ilex aquifolium*, a dense species-poor woodland, with a ground layer of bramble *Rubus fruticosus*, honeysuckle *Lonicera periclymenum*, occasional heath relicts such as bell heather and, in one place, the Surrey rarity common wintergreen *Pyrola minor*. Wet heath becomes overgrown with tussocky purple moor-grass and shrubs such as downy birch *Betula pubescens* and grey and goat sallows *Salix cinerea* and *S. caprea*. Some areas have developed into alder *Alnus glutinosa* woodland. One area near Grid Ref SU 930 595 is particularly rich, supporting moschatel *Adoxa moschatellina*, wood anemone *Anemone nemorosa*, pignut *Conopodium majus*, the Surrey rarity lemon-scented fern *Oreopteris limbosperma* and the nationally scarce² marsh fern *Thelypteris thelypteroides*.

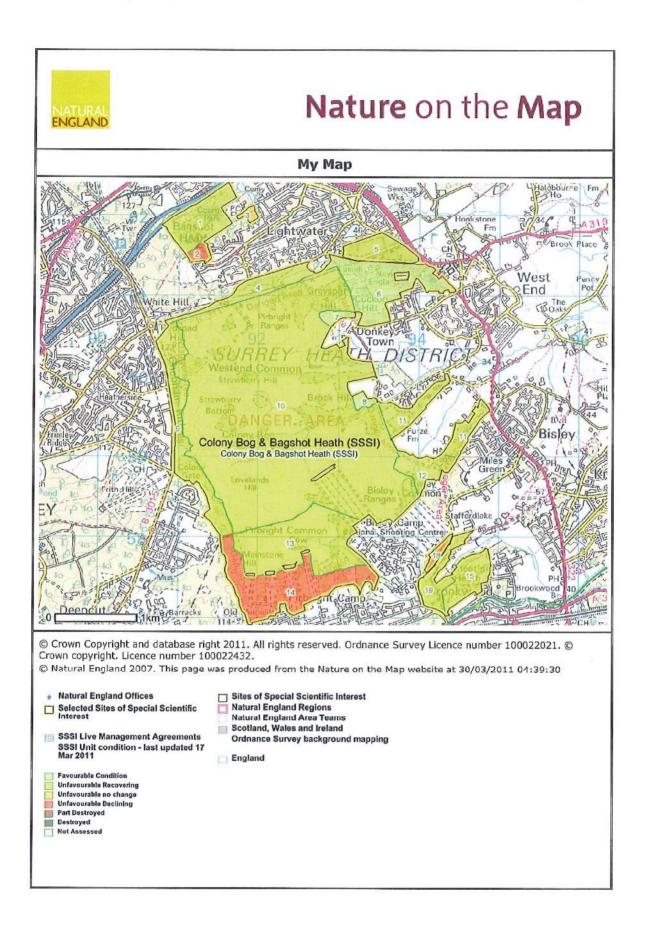
Neutral grassland

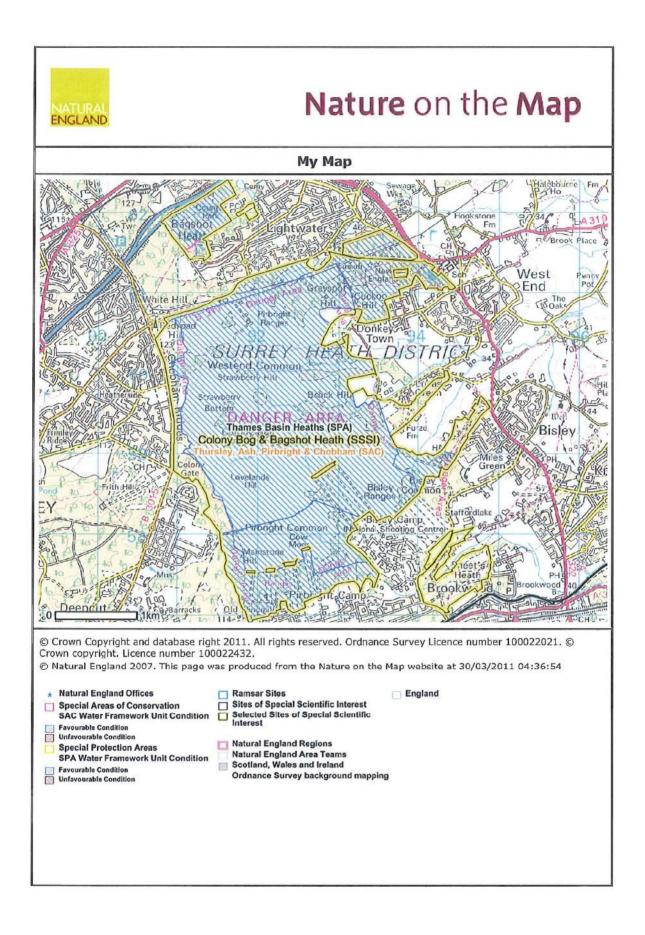
Several fields near map references SU 932 596 and SU 930 607 support rich grassland a habitat type becoming rare in the county. The sward of the wetter fields is maintained by traditional cattle-grazing and is dominated by grasses such as crested dog's-tail *Cynosurus cristatus* and common bent *Agrostis capillaris*, many broad|leaved plants including meadow-sweet *Filipendula ulmaria*, marsh marigold *Caltha palustris*, devil's-bit scabious *Succisa pratensis* and sedges such as star sedge *Carex echinata*, carnation sedge *C. panicea* and oval sedge *C. ovalis*. The diverse flora also includes southern marsh orchid *Dactylorhiza praetermissa*, heath spotted orchid *D. maculata* and hybrids of these two, bog pimpernel *Anagallis tenella*, ragged robin *Lychnis flos-cuculi*, valerian *Valeriana officinalis* and meadow thistle *Cirsium dissectum*.

Drier areas are dominated by crested dogs-tail, red fescue *Festuca rubra* and meadow buttercup *Ranunculus acris*, with cat's-ear *Hypochaeris radicata*, common sorrel *Rumex acetosa* and autumn hawkbit *Leontodon autumnalis*.

² Nationally scarce species recorded from 16-100 10x10km squares in Britain.







EC Directive 79/409 on the Conservation of Wild Birds Special Protection Area (SPA)

Name: Thames Basin Heaths

Unitary Authority/County: Bracknell Forest; Hampshire; Surrey; Windsor and Maidenhead.

Site description: The Thames Basin Heaths SPA is a composite site that is located across the counties of Surrey, Hampshire and Berkshire in southern England. It encompasses all or parts of Ash to Brookwood Heaths Site of Special Scientific Interest (SSSI), Bourley and Long Valley SSSI, Bramshill SSSI, Broadmoor to Bagshot Woods and Heaths SSSI, Castle Bottom to Yateley and Hawley Commons SSSI, Chobham Common SSSI, Colony Bog and Bagshot Heaths SSSI, Eelmoor Marsh SSSI, Hazeley Heath SSSI, Horsell Common SSSI, Ockham and Wisley Commons SSSI, Sandhurst to Owlsmoor Bogs and Heaths SSSI and Whitmoor Common SSSI.

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

Size of SPA: The SPA covers an area of 8274.72 ha.

Qualifying species:

The site qualifies under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex 1 species	Count and season	Period	% of GB population
Nightjar Caprimulgus europaeus	264 churring males – breeding	1998/99	7.8%
Woodlark Lullula arborea	149 pairs - breeding	1997	9.9%
Dartford warbler Sylvia undata	445 pairs - breeding	1999	27.8%

Non-qualifying species of interest: Hen harrier Circus cyaneus, merlin Falco columbarius, short-eared owl Asio flammeus and kingfisher Alcedo atthis (all Annex I species) occur in non-breeding numbers of less than European importance (less than 1% of the GB population).

Status of SPA:

Thames Basin Heaths was classified as a Special Protection Area on 9 March 2005.

	This citation/map relates to a site entered in
	the Register of European sites for Great Britain.
	Register reference number. UK
	Date of registration
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	Signed Trever Jelle
	On behalf of the Secretary of State for Environment
	Fund and Rural Affairs

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Thursley, Ash, Pirbright and Chobham

Unitary Authority/County: Surrey

SAC status: Designated on 1 April 2005

Grid reference: SU914411
SAC EU code: UK0012793

Area (ha): 5138.00

Component SSSI: Ash to Brookwood Heaths SSSI, Chobham Common SSSI,

Colony Bog and Bagshot Heath SSSI, Thursley, Hankley and

Frensham Commons SSSI

Site description:

The heathland is a series of large fragments of previously more continuous areas and is principally dominated by heather – dwarf gorse (*Calluna vulgaris – Ulex minor*) dry heathland. There are transitions to wet heath and valley mire, scrub, woodland and acid grassland, including types rich in annual plants. This habitat supports an important assemblage of animal species, including numerous rare and local invertebrate species, including the nationally rare white-faced darter *Leuccorhinia dubia*, as well as sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*.

This site supports the sole area of lowland northern Atlantic wet heath in south-east England. The wet heath at Thursley is mainly cross-leaved heath – bog-moss (*Erica tetralix* – *Sphagnum compactum*) and contains several rare plants, including great sundew *Drosera anglica*, bog hair-grass *Deschampsia setacea*, bog orchid *Hammarbya paludosa* and brown beak-sedge *Rhynchospora fusca*.

Depressions on peat substrates are widespread, both in bog pools, mires and in flushes where they occur as part of a mosaic associated with valley bog and wet heath. They show extensive representation of brown-beak sedge and are also important for great sundew and bog orchid *Hammarbya paludosa*.

Qualifying habitats: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Depressions on peat substrates of the *Rhynchosporion*
- European dry heaths
- Northern Atlantic wet heaths with *Erica tetralix*. (Wet heathland with cross-leaved heath)

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0012793 Date of registration: 14 June 2005

Signed: Treat Salar

On behalf of the Secretary of State for Environment,

Food and Rural Affairs

