

Background Ecological Data Search; Land North of Keens Lane, Guildford, Surrey

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**Surrey Biodiversity Information Centre
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**for
Surrey Wildlife Trust – Ecology Services**



C/O Surrey Wildlife Trust, School Lane, Pirbright Woking, Surrey, GU24 0JN

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1.0 Introduction

The following report has been compiled by the Surrey Biodiversity Information Centre (SBIC) on behalf of Surrey Wildlife Trust – Ecology Services as part of a desktop ecological assessment of land near Horley, Surrey. Based on our standard data search service it includes information on a) any statutory or non-statutory designated sites (i.e. sites of international, national and regional/local importance) falling within a two kilometre search area centred on land north of Keens Lane, Guildford, Surrey (shown highlighted in blue on the map attached to your email of the 19th April, approximate site centre Ordnance Survey grid reference SU977524). In addition our report will also include information on a) all protected species, b) all rare/notable species, c) all Priority Species as identified in the UK Biodiversity Action Plan falling within a one kilometre search area centred this same location. The report is completed by a series of maps showing the respective search areas together with details of any designated sites (Annex A).

2.0 Site Designations

2.1 Statutory Designated Sites

2.1.1 International Designations

Site Name	Grid Reference	Area (ha)	Nature Conservation Interest
Thames Basin Heaths Special Protection Area (SPA)	Various	8274.72	Classified under Article 4.1 of EC Directive 79/409 on the Conservation of Wild Birds (the Birds Directive) as it is regularly used by 1% or more of the Great Britain populations of the following species listed in Annex I in any season: Nightjar (<i>Caprimulgus europaeus</i>); 7.8% Great Britain population, Woodlark (<i>Lullula arborea</i>); 9.9% Great Britain population, Dartford Warbler (<i>Sylvia undata</i>); 27.8% Great Britain population.

2.1.2 Sites of Special Scientific Interest

Site Name	Grid Reference	Area (ha)	Nature Conservation Interest
Whitmoor Common SSSI	SU985535	164.3 ha	A Site of Special Scientific Interest notified under Section 28 of the Wildlife and Countryside Act 1981. Notified in 1985, revised 1993. "Whitmoor Common is an extensive area of London Basin heathland characteristic of the soils of the Bagshot and Bracklesham Beds. The site contains a range of heathland habitats, as well as areas of woodland, grassland, and both standing and running water. A mosaic of wet heath and acidic grassland dominates the open areas. There is also an extensive area of dry heath as well as smaller stands of bracken and neutral grassland. Approximately half the site is covered with woodland, which varies in its age and composition. This site is the location of a rare spider, a scarce beetle, and two plants which occur only rarely in Surrey. It supports many characteristic heathland birds, including a strong breeding population of Nightjar (<i>Caprimulgus europaeus</i>), a bird listed on Annex I of the Birds Directive."

A copy of the original SSSI citation is included for your information (Annex B). Any action or development thought likely to affect a designated site in any way must first be referred to the local office of Natural England. For more information see <https://www.gov.uk/government/organisations/natural-england/about/access-and-opening>.

2.1.3 Local Nature Reserves

One site falling within the two kilometre search area has been declared a Local Nature Reserve (LNR) under section 21 of the National Parks and Access to the Countryside Act 1949. Whitmoor and Rickford Commons LNR (SU980538) was designated 2003 and currently covers 189.2 ha. For more information please contact the respective principal designating authorities or the site owners/managers at the following address;

Whitmoor and Rickford Commons LNR
Surrey Wildlife Trust Estates Team
Pond Farm, Wisley Common
Woking
Surrey
GU23 6QS

Tel: 01483 910087
Email: countryside@surreywt.org.uk

2.2 Non-Statutory Designated Sites

2.2.1 Local Wildlife Sites

Local Wildlife Sites or Sites of Nature Conservation Importance (SNCLIs) as they are known in Surrey are identified on account of the habitats and flora/fauna they support, and are of County or regional wildlife importance.

They are selected by a panel of ecologists who together comprise the Surrey Local Sites Partnership (SLSP - formerly the Surrey Nature Conservation Liaison Group or SNCLG), which is made up of representatives from Surrey County Council, district and borough councils, Natural England, Environment Agency, Surrey Wildlife Trust, County Recorders and representatives from Surrey's specialist species recording and conservation groups. Each SNCLI has been selected according to criteria outlined in *Criteria for SNCLI Selection in Surrey* published by the SNCLG in July 1997, subsequently revised and updated in Gibbs, Claire (2008); *Guidelines for the selection of Sites of Nature Conservation Importance (SNCLIs) in Surrey*, Surrey Wildlife Trust, Pirbright, Surrey.

The designation of SNCLIs in no way diminishes the importance of other areas of semi-natural habitat in Surrey, and it is recognised that all semi-natural habitat is important for wildlife and of potential education value. The assessment and designation of SNCLIs is a continual process and new sites will be identified as scientific knowledge of individual sites and of the total resource increases.

All of the SNCLIs described below fall within the administrative areas covered by Guildford or Woking Borough Councils. 242 sites were originally surveyed in Guildford between 1993 and 1996 as part of a Borough wide review carried out by the Surrey Wildlife Trust on behalf of the Borough Council and Surrey County Council. Candidate sites were then reviewed by the SNCLG at a series of meetings in 1996. 82 SNCLIs were initially identified across Guildford, all of which have now been adopted by the Borough Council and incorporated into the adopted Guildford Borough Local Plan 2003 as Policy NE3. A partial re-survey took place on a number of sites across the Borough between 2004 and 2010 and again between 2013 and 2016, proposed changes including boundary amendments and the selection of a limited number of additional sites were approved by the SNCLG / SLSP between 2005 and 2011 and again between 2014 and 2017.

108 sites in Woking were originally surveyed between 1993 and 1996 while candidate sites were reviewed by the SNCLG at a series of meetings in 1996 and incorporated into the adopted Woking Borough Local Plan 1999 as Policy NE2. A partial re-survey took place between 2003 & 2004 and 2009 & 2010 and proposed changes including boundary amendments and the selection of a limited number of additional sites were approved by the LSP in 2005 and 2011.

The Non-Statutory Designated Site table lists the name and reference number of each SNCI together with an Ordnance Survey grid reference, the size and the nature conservation interest of each site. A map showing both the search area and the boundary of each SNCI can be found in Annex A. Please note, the report and maps only show SNCIs that fall either wholly or partially within the two kilometre search area. The absence of any information outside this area should not be taken to mean that an SNCI has not been identified in this area.

Site Name	SLSP Ref. No.	Grid Reference	Area (ha) /Length (km)	Borough / District	Nature Conservation Interest
Ellis's Field and Marne's Field SNCI (Field at Rye Farm and Marne's Field)	GU001, GU002	SU976546, SU975547	2.2 ha	Guildford	The site is selected for its unimproved and semi-improved grassland habitat with a long history of positive management. A total of 35 species typical of grassland of conservation interest in Surrey have been recorded in Ellis's Field since 1994. 19 have been recorded in Marne's Field since 1994. The Early Marsh Orchid, <i>Dactylorhiza incarnata</i> and Heath Spotted Orchid, <i>Dactylorhiza maculata</i> (VC17 Scarce) have both been recorded on the site. The site's position is important with Rickford Common Site of Nature Conservation Importance immediately to the west and Whitmoor Common Site of Special Scientific Interest to the south.
Slyfield Meadow and Riverside Park SNCI	GU017, GU018	TQ004514	73.4 ha	Guildford	The site comprises a mosaic of dry grassland, fen, swamp, wet meadows, open water, scrub and ancient semi-natural woodland. Of particular significance is one of the largest expanses of fen swamp in Surrey which supports a number of county scarce plants and has considerable bird and invertebrate interest. It was recommended by Surrey Bird Club in the past as good for breeding Lapwings (<i>Vanellus vanellus</i>) and wintering Water Pipits (<i>Anthus spinoletta</i>). 45 plant species typical of grassland of conservation interest in Surrey were recorded across the site in 2016. Notable plant species recently recorded on the site include; Marsh Stitchwort (<i>Stellaria palustris</i> , GBRL & ERL - Vulnerable) - 2016, Marsh Sow-thistle (<i>Sonchus palustris</i> , Nationally Scarce) - 2015, Corky-fruited Water-dropwort (VC17 Scarce) - 2016, Fine-leaved Water-dropwort (<i>Oenanthe pimpinelloides</i> , VC17 Scarce) - 2016, Lesser Spearwort (<i>Ranunculus flammula</i> VC17 Scarce) - 2016, Ragged-robin (<i>Silene flos-cuculi</i> , VC17 Scarce) - 2016 and Common Valerian (<i>Valeriana officinalis</i> , VC17 - Scarce) - 2016 The site lies within a network of wetland sites along the River Wey and Navigation and lies within the River Wey (plus tributaries) Biodiversity Opportunity Area (BOA RO4).
Merrist Wood House Meadow SNCI	GU044	SU961534	0.3 ha	Guildford	Unimproved mesotrophic grassland.

Site Name	SLSP Ref. No.	Grid Reference	Area (ha) /Length (km)	Borough / District	Nature Conservation Interest
Merrist Wood SNCI	GU064	SU955539	54.7 ha	Guildford	Broadleaved semi-natural, mixed and coniferous plantation woodland, part ancient. Selected for ancient semi-natural woodland and wet woodland with 31 ancient woodland indicator species recorded.
Littlefield Common SNCI	GU065	SU960526	18.1ha	Guildford	Public access site supporting relict wet and dry heath, as well as locally significant Alder wood (<i>Alnus glutinosa</i>). The site also contains areas of Oak (<i>Quercus robur</i>) – Birch (<i>Betula</i> sp.) woodland, mesotrophic grassland, coarse acid grassland/mire and three ponds. There are a number of locally scarce vascular plants as well as several protected amphibians.
Rickford Common SNCI	GU066	SU974545	15 ha	Guildford	The site, which lies adjacent to the Whitmoor Common SSSI, is important for its relict wet and humid heath communities. Juvenile Birch (<i>Betula</i> sp.) scrub and secondary Birch (<i>Betula</i> sp.) - Pine (<i>Pinus</i> sp.) woodland is also present. The site supports a County scarce species.
Stringers Common SNCI	GU097	SU992527	37.5 ha	Guildford	Open access site supporting broad-leaved semi-natural Oak-Birch woodland and Willow scrub, with remnant patches of wet acid grassland and heath. Recommended by Surrey Bird Club as a good site for two RSPB “Amber” Listed birds.
Broadstreet Common and Backside Common SNCI	GUI04, GUI05	SU955505	150 ha	Guildford	Public access site supporting significant areas of unimproved acidic and mesotrophic grassland, as well as semi-improved grassland, broad-leaved semi-natural woodland, scrub, ponds and a stream. The site supports a number of locally scarce species and a nationally scarce and declining plant.
Worplesdon Village Green SNCI	GUI39	SU971536	0.5 ha	Guildford	Selected for the presence of Chamomile (<i>Chamaemelum nobile</i>), a vulnerable Surrey species.
Jacobs Well Village Ponds SNCI	GUI49	SU997527	0.86 ha	Guildford	Two medium-sized ponds, 200m apart on large green. Area also includes a drain, scrub and rank grassland. Selected for supporting ‘good’ populations of all three species of native newt; Palmate Newt (<i>Triturus helveticus</i>), Smooth Newt (<i>Triturus vulgaris</i>) and Great Crested Newt (<i>Triturus cristatus</i>). The surrounding terrestrial habitat is included. This includes the scrub and rank grassland surrounding the ponds and a drain running along the southern boundary of the site. The ponds also have a good water beetle assemblage.
Chitty’s Common SNCI	GUI53	SU979522	4.4 ha	Guildford	Secondary broadleaved wet and dry woodland, grassland, scrub and ponds. This site supports a good breeding population of Great Crested Newt (<i>Triturus cristatus</i>).

Site Name	SLSP Ref. No.	Grid Reference	Area (ha) /Length (km)	Borough / District	Nature Conservation Interest
Poor Jack's Wood SSCI	WO026	SU994540	11.5 ha	Woking	The site principally comprises coniferous woodland on former heathland with remnant heathland species along the edges of open rides and in cleared areas, suggesting the potential for heathland restoration. Stands of mature Scots Pine (<i>Pinus sylvestris</i>) and Western Hemlock (<i>Tsuga heterophylla</i>) form most of the conifer woodland. On poorly drained areas in the north, Downy Birch (<i>Betula pubescens</i>) is dominant. Selected as important site for heathland birds, including Nightjar <i>Caprimulgus europaeus</i> , & as conifer woodland supporting heathland species

2.2.2 Ancient Woodland

Nine sites falling within the two kilometre search area appear on the Revised Ancient Woodland Inventory¹ for the County.

Ancient woodland is defined by Natural England as a site that has had a continuous woodland cover since at least 1600 AD. It is an irreplaceable, wildlife-rich habitat, and often includes important archaeological features. Surrey is one of the most wooded parts of lowland Britain and supports approximately 37,700 ha of woodland, of which, 11,935 ha (or 7.1% of the of the County) are considered to be Ancient.

Ancient woodland is commonly divided into two broad categories, Ancient Semi-natural Woodland and Plantations on Ancient Woodland Sites. Both types of stand are classed as ancient woodland. Ancient semi-natural woodland (ASNW) are stands that are composed predominantly of trees and shrubs native to the site that do not obviously originate from planting. They include stands that may have been managed by coppicing or pollarding in the past, as well as those where the tree and shrub layer has grown up by natural regeneration. Plantations on ancient woodland sites (PAWS) are areas of ancient woodland where the original native tree cover has been felled and replaced by planted stock most commonly of a species not native to the site, for example conifers such as Norway Spruce (*Picea abies*) or Corsican Pine (*Pinus nigra* var. *maritime*), but also broadleaves such as Sycamore (*Acer pseudoplatanus*) or Sweet Chestnut (*Castanea sativa*).

Ancient woodland status is determined using information from historic Ordnance Survey and other historic sources and information about the name of the wood, its shape, relief, internal boundaries and location relative to other features such as parish boundaries. Ground survey information such as flora and historical features plus aerial photography interpretation is also used when available. The original inventory was produced by Nature Conservancy Council (later English Nature) on a county-by-county basis in the 1980's and 1990's and included all sites over two hectares in size. Access to additional resources and advances in digital mapping techniques mean that it is now possible to map woodlands under two hectares with greater ease and accuracy and since 2005 this led to an on-going project to completely revise and update the Ancient Woodland Inventory across the South East. The Surrey Ancient Woodland Survey was carried out by Surrey Biodiversity Information Centre on behalf of Natural England, Forestry Commission, Surrey Hills AONB, Surrey County Council and ten Borough/District Councils from 2009 until 2011. The results of this work have now been adopted by Natural England and incorporated into the national ancient woodland inventory. The details of any ancient woodland sites contained in this report taken from the final SBIC version of this dataset. Please note, the Ancient Woodland Inventory should always be classed as "provisional" and will be reviewed and updated as new information comes to light.

The following table shows the unique identification for each site, site name (where known), an Ordnance Survey grid reference and the area of the site as shown on the Inventory. The site name and grid reference used are taken directly from the Inventory and may therefore not necessarily match those used elsewhere in this report.

Code	Wood Name (Where Identified)	Type	Borough/District	Parish	Grid Reference	Area (ha)
SRY_779		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU956519	0.7
SRY_1676		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU968540	0.4
SRY_1677		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU978533	0.5
SRY_1678		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU968538	1.1
SRY_1710		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU979544	0.5
SRY_1711		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU972529	0.2
SRY_3674		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU962537	2.0
SRY_4917		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU958538	15.4
SRY_5269		Ancient Semi-natural Woodland	Guildford District (B)	Worplesdon CP	SU961536	4.2

2.2.3 Conservation Verges

One site falling within the two kilometre search area has been identified as a Conservation Verge as part of the Road Verge Habitat Action Plan.

The Surrey Road Verge Habitat Action Plan (RVHAP - part of the Surrey Biodiversity Action Plan) aims to raise awareness of the biodiversity potential of vergeside habitat and identifies how this can be managed to maintain and enhance biodiversity in a way which best balances the competing interests of conservation and road safety. The RVHAP has been produced by a working group including representatives from Surrey County Council, Borough and District Councils, the term contractors responsible for carrying out road verge management, Surrey Wildlife Trust, Surrey Botanical Society and Surrey Biodiversity Information Centre and is relevant to all those involved in the management of road verges in Surrey. A copy of the full plan can be viewed online at www.surreybiodiversitypartnership.org.

One of the key sections of the RVHAP was to identify the County's most important verges for wildlife. Once selected, these Conservation Verges were mapped by Surrey Biodiversity Information Centre and information on their location passed to all relevant bodies including public utilities. Each Conservation Verge will also have a management regime applied to it which best supports the interest of that site.

The wildlife importance of many verges in Surrey has already been recognised as part of larger designated wildlife sites such as Sites of Special Scientific Interest (SSSI) or Sites of Nature Conservation Importance (SNCI) however the guidelines used to identify Conservation Verges apply different criteria which reflect the particular character of these sites. A verge of any length or size can become a Conservation Verge as long as it meets one of the following criteria:

- It supports a population of nationally or locally rare or scarce species or,
- It contains semi-natural vegetation containing a good population or assemblage of species of conservation interest in Surrey or,
- The verge is culturally important and of intrinsic value to local people for its wildlife or,
- It forms part of a larger site, or connects sites that have an existing wildlife designation such as a SSSI or SNCI.

The selection and review of Conservation Verges will be a continual process. The following table shows the unique identification number for each verge, the site name, an Ordnance Survey grid reference for the central point of the verge, its length and the nature conservation interest of each site.

CV Number	Site Name	Length (m)	Grid Reference	Borough	Parish	Site Description	Biodiversity Interest
CV031	Salt Box Road	614.4	SU99085297	Guildford District (B)	Worplesdon CP	Both verges, approximately 200m in either direction from central grid reference.	County population of significance for Common Toad (<i>Bufo bufo</i>) - SCC registered toad crossing site number 29.

2.2.4 Biodiversity Opportunity Areas

Biodiversity Opportunity Areas (BOAs) identify the most important areas for wildlife conservation in Surrey, where targeted conservation action will have the greatest benefit. The main aim within BOAs is to restore biodiversity at a landscape scale through the maintenance, restoration and creation of Priority habitats. BOAs have been identified across Surrey and link with BOAs mapped across the whole of south-east England. There are currently 50 BOAs covering some 39% of Surrey. These were mapped by SBIC in consultation with local authorities and conservation organisations in Surrey. They were identified by taking into account existing concentrations of Priority habitats and important areas for Priority species. The potential for habitat restoration was also considered and took into account geology, topography and hydrology. A policy statement is in preparation for each BOA identifying the features of biodiversity importance and its specific conservation objectives, as well as targets for maintenance, restoration and creation of Priority habitats, and recovery of Priority species populations.

Three BOAs have currently been identified within the two kilometre search area. These are;

- TBH04: Ash, Brookwood & Whitmoor Heaths
- TBL01: Wanborough & Normandy Woods & Meadows
- R04: River Wey (& tributaries)

Copies of the current BOA statements are included in Annex B and should be read in association with *Biodiversity Opportunity Areas: the basis for realising Surrey's ecological network*, Surrey Nature Partnership, December 2015.

3.0 Protected Species

SBIC currently holds information on a number of species protected either by national or international legislation which have been recorded from one kilometre squares falling within the one kilometre search area. This list should not be regarded as definitive and it is likely that further detailed survey work would be necessary prior to any development to ascertain the full extent of any activity. Furthermore, it should also be noted that although SBIC currently has data sharing agreements with many of Surrey's specialist recording societies we may only hold limited information for a number of important taxonomic groups. Similarly, although data transfers take place on a regular basis, we may not always hold the most up to date records for a particular area. For more detailed information on the use of sites within the study area by amphibians and reptiles, birds and protected mammals (specifically bats/roost sites and badgers/setts) please contact the following individuals or groups.

Amphibians and Reptiles

Steve Langham
Surrey Amphibian and Reptile Group
Panorama
Folly Hill
Farnham
Surrey, GU9 0BD
Email: services@surrey-arg.org.uk

Bats

The Surrey Bat Group
C/O The Surrey Wildlife Trust
School Lane
Pirbright
Woking
Surrey
GU24 0JN

Birds

County Recorder
Eric Soden
Ceres
Moushill Lane
Milford
GU8 5BQ
Email: eric.soden@talktalk.net

Badgers

West Surrey Badger Group
P.O. Box 67
Guildford
GU3 1YR
E-mail: wsbg@wsbg.co.uk

The following table lists species in taxonomic order by each one kilometre square of the search area. Information on the protected status of each species is taken from the Recorder 6 species database and *Checklist of Legally Protected British Species* (Betts 2008) ² and in each case, the relevant Schedule or Annex which describes the nature and level of protection is shown. For more information please see Annex D. Please note, where a site straddles the edge of the search area all relevant records recorded from that site have been included in this report. Species records for a site are commonly assigned a locational reference based on the Ordnance Survey grid reference for the centre of that site. As such, although part of a site may legitimately fall inside a search area, its geographical centre may lie outside. As a result the following tables

may include species apparently recorded from one kilometre squares falling outside your original search area. (N.B Throughout this report, where this occurs, the relevant 1 kilometre squares are enclosed by brackets).

1Km Grid Square	Taxon Common Name	Recommended Taxon Name	UK Protected Species	European Protected Species	Date Last Recorded	Source of Record
SU9651	Bluebell	<i>Hyacinthoides non-scripta</i>	W&C Act 1981 (Sch. 8)		1997	BSBI VC17
	Smooth Newt	<i>Lissotriton vulgaris</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	1989	SBIC - Other Records
	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	-1992	SBIC - Other Records
	Common Toad	<i>Bufo bufo</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	1990	SBIC - Other Records
	Common Frog	<i>Rana temporaria</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 5	1990	SBIC - Other Records
	Kestrel	<i>Falco tinnunculus</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Green Woodpecker	<i>Picus viridis</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Great Spotted Woodpecker	<i>Dendrocopos major</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Wren	<i>Troglodytes troglodytes</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Dunnock	<i>Prunella modularis</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Robin	<i>Erithacus rubecula</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Goldcrest	<i>Regulus regulus</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Blue Tit	<i>Cyanistes caeruleus</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Great Tit	<i>Parus major</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Coal Tit	<i>Periparus ater</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology

	Nuthatch	<i>Sitta europaea</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Treecreeper	<i>Certhia familiaris</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Linnet	<i>Linaria cannabina</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Greenfinch	<i>Carduelis chloris</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Goldfinch	<i>Carduelis carduelis</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Yellowhammer	<i>Emberiza citrinella</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Reed Bunting	<i>Emberiza schoeniclus</i>		Bern Convention Appendix 2	-1993	British Trust for Ornithology
	Roe Deer	<i>Capreolus capreolus</i>		Bern Convention Appendix 3	2004	SNCI Survey
	Water Vole	<i>Arvicola amphibius</i>	W&C Act 1981 (Sch. 5 All Sections)		2002	Surrey Mammal Group
SU9652	Compact Bog-moss	<i>Sphagnum compactum</i>		Habitats Directive Annex 5	1995	SNCI Survey
	Fringed Bog-moss	<i>Sphagnum fimbriatum</i>		Habitats Directive Annex 5	1995	SNCI Survey
	a bog moss	<i>Sphagnum recurvum</i>		Habitats Directive Annex 5	1995	SNCI Survey
	Soft Bog-moss	<i>Sphagnum tenellum</i>		Habitats Directive Annex 5	1995	SNCI Survey
	Bluebell	<i>Hyacinthoides non-scripta</i>	W&C Act 1981 (Sch. 8)		2005	BSBI VC17
	Palmate Newt	<i>Lissotriton helveticus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	Smooth Newt	<i>Lissotriton vulgaris</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	2005	SWT - Nature Reserve / Open Space
	Common Toad	<i>Bufo bufo</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	Common Frog	<i>Rana temporaria</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 5	2005	SWT - Nature Reserve / Open Space
	Red Kite	<i>Milvus milvus</i>	W&C Act 1981 (Sch. 1 Part 1)	Birds Directive Annex 1	2010	SBIC - Other Records
	Tawny Owl	<i>Strix aluco</i>		Bern Convention Appendix 2	2004	SWT - Nature Reserve / Open Space

	Great Spotted Woodpecker	<i>Dendrocopos major</i>		Bern Convention Appendix 2	2004	SWT - Nature Reserve / Open Space
	Goldcrest	<i>Regulus regulus</i>		Bern Convention Appendix 2	2004	SWT - Nature Reserve / Open Space
	Great Tit	<i>Parus major</i>		Bern Convention Appendix 2	2004	SWT - Nature Reserve / Open Space
	Roe Deer	<i>Capreolus capreolus</i>		Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	Water Vole	<i>Arvicola amphibius</i>	W&C Act 1981 (Sch. 5 All Sections)		2000	Surrey Mammal Group
SU9653	Pennyroyal	<i>Mentha pulegium</i>	W&C Act 1981 (Sch. 8)		1990	BSBI VC17
	Bluebell	<i>Hyacinthoides non-scripta</i>	W&C Act 1981 (Sch. 8)		2014	BSBI VC17
	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	1995	SBIC - Other Records
	Water Shrew	<i>Neomys fodiens</i>		Bern Convention Appendix 3	1999	Surrey Mammal Group
SU9751	Butcher's-broom	<i>Ruscus aculeatus</i>		Habitats Directive Annex 5	2016	BSBI VC17
	Stag Beetle	<i>Lucanus cervus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 2 - non-priority species	1998	PTES National Stag Beetle Survey
	Common Frog	<i>Rana temporaria</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 5	1990	Herpetiles - General
	Grass Snake	<i>Natrix natrix</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	1990	Herpetiles - General
	Roe Deer	<i>Capreolus capreolus</i>		Bern Convention Appendix 3	2000	Surrey Mammal Group
	Water Vole	<i>Arvicola amphibius</i>	W&C Act 1981 (Sch. 5 All Sections)		2000	Surrey Mammal Group
SU9752	Stag Beetle	<i>Lucanus cervus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 2 - non-priority species	1998	PTES National Stag Beetle Survey
	Smooth Newt	<i>Lissotriton vulgaris</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2009	SWT - Nature Reserve / Open Space

	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	2009	SWT - Nature Reserve / Open Space
	Common Frog	<i>Rana temporaria</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 5	2009	SWT - Nature Reserve / Open Space
	Robin	<i>Erithacus rubecula</i>		Bern Convention Appendix 2	2004	SNCI Survey
	Long-eared Bat species	<i>Plecotus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 4	2014	Natural England Bat Advice Service (Roost Visit)
SU9753	Stag Beetle	<i>Lucanus cervus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 2 - non-priority species	1998	PTES National Stag Beetle Survey
	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	2010	SWT - Nature Reserve / Open Space
	Nightjar	<i>Caprimulgus europaeus</i>		Bern Convention Appendix 2, Birds Directive Annex I	2006	SWT - Nature Reserve / Open Space
	Grass Snake	<i>Natrix natrix</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2015	SWT - Nature Reserve / Open Space
	Stoat	<i>Mustela erminea</i>		Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	West European Hedgehog	<i>Erinaceus europaeus</i>		Bern Convention Appendix 3	2009	SWT - Otters & Rivers Project
	Roe Deer	<i>Capreolus capreolus</i>		Bern Convention Appendix 3	2007	Mammals - General
SU9851	Stag Beetle	<i>Lucanus cervus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 2 - non-priority species	1998	PTES National Stag Beetle Survey
	Hedgehog	<i>Erinaceus europaeus</i>		Bern Convention Appendix 3	1999	Surrey Mammal Group
	Serotine	<i>Eptesicus serotinus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 4	1998	Mammals - General

	Pipistrelle ⁱ	<i>Pipistrellus pipistrellus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Bern Convention Appendix 3, Habitats Directive Annex 4	1998	Mammals - General
	Brown Long-Eared Bat	<i>Plecotus auritus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 4	1998	Mammals - General
SU9852	Stag Beetle	<i>Lucanus cervus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 2 - non-priority species	1998	PTES National Stag Beetle Survey
	Smooth Newt	<i>Lissotriton vulgaris</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	1990	SBIC - Other Records
	Great Crested Newt	<i>Triturus cristatus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 2 - non-priority species, Habitats Directive Annex 4	-1992	SBIC - Other Records
	West European Hedgehog	<i>Erinaceus europaeus</i>		Bern Convention Appendix 3	2006	SBIC - Other Records
	Hedgehog	<i>Erinaceus europaeus</i>		Bern Convention Appendix 3	1998	Surrey Mammal Group
SU9853	Bluebell	<i>Hyacinthoides non-scripta</i>	W&C Act 1981 (Sch. 8)		2008	BSBI VC17
	Silver-studded Blue	<i>Plebejus argus</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)		2012	SWT - Nature Reserve / Open Space
	Smooth Newt	<i>Lissotriton vulgaris</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2005	SWT - Nature Reserve / Open Space
	Common Frog	<i>Rana temporaria</i>	W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3, Habitats Directive Annex 5	2005	SWT - Nature Reserve / Open Space
	Nightjar	<i>Caprimulgus europaeus</i>		Bern Convention Appendix 2, Birds Directive Annex 1	2006	SWT - Nature Reserve / Open Space
	Kingfisher	<i>Alcedo atthis</i>	W&C Act 1981 (Sch. 1 Part 1)	Bern Convention Appendix 2, Birds Directive Annex 1	2011	SWT - Nature Reserve / Open Space
	Woodlark	<i>Lullula arborea</i>	W&C Act 1981 (Sch. 1 Part 1)	Birds Directive Annex 1	2006	SWT - Nature Reserve / Open Space
	Stonechat	<i>Saxicola rubicola</i>		Bern Convention Appendix 2	2006	SWT - Nature Reserve / Open Space

ⁱ Research in the early 1990's first suggested that the bat formerly known as the Common Pipistrelle was in fact two different but closely related species. Detailed physical and DNA analysis has now confirmed that this is the case. The two species; the Common Pipistrelle (*Pipistrellus pipistrellus*) and the Soprano Pipistrelle (*Pipistrellus pipistrellus*) are normally differentiated by differences in their peak echolocation frequency.

	Dartford Warbler	<i>Sylvia undata</i>	W&C Act 1981 (Sch. 1 Part 1)	Birds Directive Annex 1	2006	SWT - Nature Reserve / Open Space
	Common (Mealy) Redpoll	<i>Acanthis flammea</i>		Bern Convention Appendix 2	2006	SWT - Nature Reserve / Open Space
	Linnet	<i>Linaria cannabina</i>		Bern Convention Appendix 2	2006	SWT - Nature Reserve / Open Space
	Slow-worm	<i>Anguis fragilis</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2015	SWT - Nature Reserve / Open Space
	Common Lizard	<i>Zootoca vivipara</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2015	SWT - Nature Reserve / Open Space
	Grass Snake	<i>Natrix natrix</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2014	SWT - Nature Reserve / Open Space
	Adder	<i>Vipera berus</i>	W&C Act 1981 (Sch. 5 Sec. 9.1 (killing/injuring)), W&C Act 1981 (Sch. 5 Sec. 9.5a), W&C Act 1981 (Sch. 5 Sec. 9.5b)	Bern Convention Appendix 3	2009	SWT - Nature Reserve / Open Space
	Roe Deer	<i>Capreolus capreolus</i>		Bern Convention Appendix 3	2000	Surrey Mammal Group
	Water Vole	<i>Arvicola amphibius</i>	W&C Act 1981 (Sch. 5 All Sections)		2000	Surrey Mammal Group

In addition to the information presented above, SBIC currently holds information on the following species recorded from the ten kilometre squares which cover the one kilometre search area. These records are not currently held in a format which allows analysis at the same level of detail as other species records, however these records are included in this report as they provide a guide to the species which may be present within the wider search area.

10Km Grid Square	Common Name	Scientific Name	Wildlife & Countryside Act Schedule	International Status	Date Last Recorded	Source of Record
SU95	Compact Bog-moss	<i>Sphagnum compactum</i>		Habitats Directive Annex 5	2012	British Bryological Society VC17
	Large White-moss	<i>Leucobryum glaucum</i>		Habitats Directive Annex 5	2012	British Bryological Society VC17
	Red Kite	<i>Milvus milvus</i>	W&C Act 1981 (Sch. 1 Part 1)	Birds Directive Annex 1	2005	SBIC - Other Records
	Pipistrelle	<i>Pipistrellus pipistrellus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Bern Convention Appendix 3, Habitats Directive Annex 4	1984	Surrey Mammal Group
	Brown Long-eared Bat	<i>Plecotus auritus</i>	The Conservation (Natural Habitats, &c.) Regulations 2010 (Sch. 2), W&C Act 1981 (Sch. 5 All Sections)	Bern Convention Appendix 2, Habitats Directive Annex 4	2008	BCT Bechstein's Bat Project

Any work or activity likely to affect any species covered by a relevant Schedule of the Conservation of Habitats and Species Regulations 2010 or the Wildlife and Countryside Act 1981 (as amended), must first be referred to the relevant office of Natural England.

4.0 Notable / Rare Species

SBIC currently holds information on the following species recorded from one kilometre squares falling within the one kilometre search area which are thought to be rare or notable at either a national or a regional level. In each case, the known distribution of all populations (both native and non-native) as shown in the relevant County atlas is also shown where available.

Once again, the following table lists species by one kilometre square and then by taxonomic order. Information on the national status of each species is taken from the Recorder 6 species database. For more information please see Annex D.

1Km Grid Square	Taxon Common Name	Recommended Taxon Name	National Species Status	Surrey Status	Date Last Recorded	Source of Record
SU9651	Heath Dog-violet	<i>Viola canina</i>	IUCN (2001) - Lower Risk - Near Threatened	Rare, 40 tetrads, "Heaths or heathy commons, more rarely on ant-hills on the chalk, on gravel over chalk, and on a sandy bank" ³ , 1987; 18 ten kilometre squares ⁴	1997	BSBI VC17
	Kestrel	<i>Falco tinnunculus</i>	BOCC3 - Amber	Moderately common breeding resident ⁵	-1993	British Trust for Ornithology
	Redshank	<i>Tringa totanus</i>	BOCC3 - Amber	Scarce breeding resident	2004	SNCI Survey
	Turtle Dove	<i>Streptopelia turtur</i>	BOCC3 - Red	Moderately common but declining summer visitor, breeding annually	-1993	British Trust for Ornithology
	Cuckoo	<i>Cuculus canorus</i>	BOCC3 - Red	Moderately common summer visitor, breeding annually	-1993	British Trust for Ornithology
	Green Woodpecker	<i>Picus viridis</i>	BOCC3 - Amber	Common breeding resident	-1993	British Trust for Ornithology
	Willow Warbler	<i>Phylloscopus trochilus</i>	BOCC3 - Amber	Common summer visitor, breeding annually	-1993	British Trust for Ornithology
	Skylark	<i>Alauda arvensis</i>	BOCC3 - Red	Common, but reduced breeding resident	-1993	British Trust for Ornithology
	Dunnock	<i>Prunella modularis</i>	BOCC3 - Amber	Common breeding resident	-1993	British Trust for Ornithology
	Song Thrush	<i>Turdus philomelos</i>	BOCC3 - Red	Common breeding resident	-1993	British Trust for Ornithology
	Mistle Thrush	<i>Turdus viscivorus</i>	BOCC3 - Amber	Common breeding resident	-1993	British Trust for Ornithology
	Whitethroat	<i>Sylvia communis</i>	BOCC3 - Amber	Common summer visitor, breeding annually	-1993	British Trust for Ornithology

	Starling	<i>Sturnus vulgaris</i>	BOCC3 - Red	Common breeding resident	-1993	British Trust for Ornithology
	House Sparrow	<i>Passer domesticus</i>	BOCC3 - Red	Locally common breeding resident	-1993	British Trust for Ornithology
	Linnet	<i>Linaria cannabina</i>	BOCC3 - Red	Locally common breeding resident	-1993	British Trust for Ornithology
	Bullfinch	<i>Pyrrhula pyrrhula</i>	BOCC3 - Amber	Common breeding resident	-1993	British Trust for Ornithology
	Yellowhammer	<i>Emberiza citrinella</i>	BOCC3 - Red	Locally common breeding resident	-1993	British Trust for Ornithology
	Reed Bunting	<i>Emberiza schoeniclus</i>	BOCC3 - Amber	Locally common breeding resident	-1993	British Trust for Ornithology
SU9652	a click beetle	<i>Ampedus sanguinolentus</i>	Nationally Notable A	Very Local on heathland amongst heather, and under birch and pine bark ⁶	2006	SWT - Nature Reserve / Open Space
	a darkling beetle	<i>Eledona agricola</i>	Nationally Notable B	Local in fungi, usually chicken-of-the-woods <i>Laetiporus sulphureus</i> especially on oak and cherry	2010	SWT - Nature Reserve / Open Space
	a darkling beetle	<i>Diaperis boleti</i>	IUCN (pre 1994) - Vulnerable		2007	SWT - Nature Reserve / Open Space
	Brown Ant	<i>Lasius brunneus</i>	Nationally Notable A	Local in woodland and parkland ⁷	2010	SWT - Nature Reserve / Open Space
	Red Kite	<i>Milvus milvus</i>	BOCC3 - Amber	Lost resident, now a scarce but increasing passage migrant	2010	SBIC - Other Records
SU9653	Monk's-rhubarb	<i>Rumex alpinus</i>	IUCN (2001) - Lower Risk - Near Threatened	No Entry, 1987; Established Alien	1981	BSBI VC17
	Pennyroyal	<i>Mentha pulegium</i>	IUCN (2001) - Endangered	Very Rare, 3 tetrads and perhaps Extinct, "Margins of small ponds and wet commons", 1987; Considered to be Extinct as a Native Plant, 4 ten kilometre squares	1990	BSBI VC17
	Green-Winged Orchid	<i>Orchis morio</i>	IUCN (2001) - Lower Risk - Near Threatened	Rare, 15 tetrads, "Usually in small numbers on chalk grassland, but most abundant in pastures which have never been ploughed, on wet clay soils,,," has suffered a spectacular decrease in the past 30 years", 1987; Rare, 11 ten kilometre squares	bef. 1995	SNCI Survey

	Mousetail	<i>Myosurus minimus</i>	IUCN (2001) - Vulnerable	Very Rare, 5 tetrads, "Wet corners of cornfields where water has stood during the winter, field gateways, arable, garden weed. Probably always on clay, decreasing rapidly", 1987; 4 ten kilometre squares	1990	BSBI VC17
	Heath Dog-Violet	<i>Viola canina</i>	IUCN (2001) - Lower Risk - Near Threatened	Rare, 40 tetrads, "Heaths or heathy commons, more rarely on ant-hills on the chalk, on gravel over chalk, and on a sandy bank", 1987; 18 ten kilometre squares	bef. 1995	SNCI Survey
	Brown Ant	<i>Lasius brunneus</i>	Nationally Notable A	Local in woodland and parkland	2007	SBIC - Other Records
SU9751	Stag Beetle	<i>Lucanus cervus</i>	Nationally Notable B	Local, avoiding clay (and chalky) soils but can be common in London suburbs, especially in gardens	1998	PTES National Stag Beetle Survey
SU9752	Galingale	<i>Cyperus longus</i>	IUCN (2001) - Lower Risk - Near Threatened	Established Alien, Rare, "Streams, ditches, wet meadows and pond margins, sometimes in very wild looking situations, 1987; 11 ten kilometre squares	2004	SNCI Survey
	Fringed Water-lily	<i>Nymphoides peltata</i>	Nationally Scarce	Rare, 8 tetrads, "native in some localities", 1987; Rare "only as a native plant" 13 ten kilometre squares	1992	BSBI VC17
	Stag Beetle	<i>Lucanus cervus</i>	Nationally Notable B	Local, avoiding clay (and chalky) soils but can be common in London suburbs, especially in gardens	1998	PTES National Stag Beetle Survey
	a dung fly	<i>Norellia spinipes</i>	Nationally Notable		2016	SBIC - Other Records
SU9753	Chamomile	<i>Chamaemelum nobile</i>	IUCN (2001) - Vulnerable	Rare, 32 tetrads, "Damp short grass on commons, roadsides and especially near ponds used by geese and ducks. A decreasing species but persistent in some old localities", 1987; 15 ten kilometre squares	2009	BSBI VC17
	Stag Beetle	<i>Lucanus cervus</i>	Nationally Notable B	Local, avoiding clay (and chalky) soils but can be common in London suburbs, especially in gardens	1998	PTES National Stag Beetle Survey
	Window Winged Sedge	<i>Hagenella clathrata</i>	IUCN (pre 1994) - Endangered		2015	SWT - Nature Reserve / Open Space
	White-barred Clearwing	<i>Synanthedon spheciformis</i>	Nationally Notable B	Resident; heathland woodland, Local ⁸	2015	SWT - Nature Reserve / Open Space

	a hoverfly	<i>Microdon analis</i>	Nationally Notable	Scarce ⁹	2015	SWT - Nature Reserve / Open Space
	Brown Ant	<i>Lasius brunneus</i>	Nationally Notable A	Local in woodland and parkland	1996	BWARS VC17
	a solitary bee	<i>Hylaeus cornutus</i>	Nationally Notable A	Local ¹⁰	1994	BWARS VC17
	a solitary bee	<i>Andrena florea</i>	IUCN (pre 1994) - Rare	Locally Very Common	1997	BWARS VC17
	Nightjar	<i>Caprimulgus europaeus</i>	BOCC3 - Red	Locally common summer visitor, breeding annually	2006	SWT - Nature Reserve / Open Space
SU9851	Stag Beetle	<i>Lucanus cervus</i>	Nationally Notable B	Local, avoiding clay (and chalky) soils but can be common in London suburbs, especially in gardens	1998	PTES National Stag Beetle Survey
SU9852	Stag Beetle	<i>Lucanus cervus</i>	Nationally Notable B	Local, avoiding clay (and chalky) soils but can be common in London suburbs, especially in gardens	1998	PTES National Stag Beetle Survey
SU9853	Marsh Gentian	<i>Gentiana pneumonanthe</i>	Nationally Scarce	Very Rare, 2 tetrads, "wet heathland" 1987; Rare, 2 ten kilometre squares	1985	BSBI VC17
	a comb-footed spider	<i>Episinus truncatus</i>	Nationally Notable B		2012	SWT - Nature Reserve / Open Space
	a money spider	<i>Neriene furcata</i>	Nationally Notable B		2012	SWT - Nature Reserve / Open Space
	an orb-weaver spider	<i>Araneus angulatus</i>	Nationally Notable B		2015	SWT - Nature Reserve / Open Space
	an orb-weaver spider	<i>Hypsosinga sanguinea</i>	Nationally Notable B		2012	SWT - Nature Reserve / Open Space
	Wasp Spider	<i>Argiope bruennichi</i>	Nationally Notable A		2012	SWT - Nature Reserve / Open Space
	Lynx Spider	<i>Oxyopes heterophthalmus</i>	IUCN (pre 1994) - Vulnerable		2012	SWT - Nature Reserve / Open Space
	a foliage spider	<i>Cheiracanthium pennyi</i>	IUCN (pre 1994) - Vulnerable		2012	SWT - Nature Reserve / Open Space
	a crab spider	<i>Thomisus onustus</i>	Nationally Notable B		2012	SWT - Nature Reserve / Open Space
	a jumping spider	<i>Evarcha arcuata</i>	Nationally Notable B		2012	SWT - Nature Reserve / Open Space
	Brilliant Emerald	<i>Somatochlora metallica</i>	IUCN (2001) - Vulnerable	60 tetrads, Confirmed, Local ¹¹	2012	British Dragonfly Society VC17

	Club-Tailed Dragonfly	<i>Gomphus vulgatissimus</i>	IUCN (2001) - Lower Risk - Near Threatened	5 tetrads, Not Breeding, straggler	1993	British Dragonfly Society VC17
	Bog Bush-cricket	<i>Metrioptera brachyptera</i>	Nationally Notable B	Restricted mainly to damp heaths but there abundant ¹²	2012	SWT - Nature Reserve / Open Space
	a ground beetle	<i>Agonum sexpunctatum</i>	Nationally Notable A	Local, on open wet heathland also in open woodland rides	1995	SBIC - Other Records
	a jewel beetle	<i>Agrilus viridis</i>	Nationally Notable A	Rare on willow etc.	1996	SBIC - Other Records
	a jewel beetle	<i>Agrilus angustulus</i>	Nationally Notable B	Saproxyllic. Local on oak, hazel etc.	1996	SBIC - Other Records
	a click beetle	<i>Ampedus sanguinolentus</i>	Nationally Notable A	Very Local on heathland amongst heather, and under birch and pine bark.	2010	SWT - Nature Reserve / Open Space
	a darkling beetle	<i>Diaperis boleti</i>	IUCN (pre 1994) - Vulnerable		2009	SWT - Nature Reserve / Open Space
	Black-Headed Cardinal Beetle	<i>Pyrochroa coccinea</i>	Nationally Notable B	Widespread, much increased in 20th Century? Larvae under bark of hardwoods (and conifers?).	2015	SWT - Nature Reserve / Open Space
	a leaf beetle	<i>Cryptocephalus bipunctatus</i>	Nationally Notable B	Very Local on heathland, on birch? Also on the downs on various trees.	2009	SWT - Nature Reserve / Open Space
	Hazel Leaf Roller	<i>Byctiscus betulae</i>	Nationally Notable B	Rare, declining? On birch and hazel.	1996	SBIC - Other Records
	a weevil	<i>Notaris scirpi</i>	Nationally Notable B	Local on lesser pond-sedge <i>Carex acutiformis</i> and other wetland plants, including <i>Typha</i> .	1997	SBIC - Other Records
	Window Winged Sedge	<i>Hagenella clathrata</i>	IUCN (pre 1994) - Endangered		2017	SWT - Nature Reserve / Open Space
	Silver-studded Blue	<i>Plebejus argus</i>	IUCN (2001) - Vulnerable	Restricted but Common ¹³ , 2000; 37 tetrads, Regional Conservation Status; High ¹⁴	2012	SWT - Nature Reserve / Open Space
	White Admiral	<i>Limenitis camilla</i>	IUCN (2001) - Vulnerable	Fairly Widespread and Fairly Common, 2000; 102 tetrads	1995	SBIC - Other Records
	a crane-fly	<i>Idioptera pulchella</i>	Nationally Notable		2012	SWT - Nature Reserve / Open Space
	Bright Four-spined Legionnaire	<i>Chorisops nagatomii</i>	Nationally Notable	Local, 42 tetrads ¹⁵	1995	SBIC - Other Records
	a dance-fly	<i>Stilpon sublunatus</i>	Nationally Notable		2009	SWT - Nature Reserve / Open Space
	a hoverfly	<i>Microdon analis</i>	Nationally Notable	Scarce	2013	SWT - Nature Reserve / Open Space
	a hoverfly	<i>Orthonevra geniculata</i>	Nationally Notable	Rare	1995	SBIC - Other Records

	a hoverfly	<i>Xylota abiens</i>	Nationally Notable	Rare	1996	SBIC - Other Records
	a fly	<i>Megamerina dolium</i>	Nationally Notable		1996	SBIC - Other Records
	a parasitic fly	<i>Gymnosoma rotundatum</i>	IUCN (pre 1994) - Rare		1997	SBIC - Other Records
	Red Wood Ant	<i>Formica rufa</i>	IUCN (1994) - Lower Risk - Near Threatened	Frequent in Open Woodland	1986	BWARS VC17
	Slaver Ant	<i>Formica sanguinea</i>	Nationally Notable B	Frequent on heathland	1998	BWARS VC17
	a spider-hunting wasp	<i>Auplopus carbonarius</i>	Nationally Notable B	Common, 162 records ¹⁶	2000	BWARS VC17
	a potter wasp or mason wasp	<i>Symmorphus crassicornis</i>	IUCN (pre 1994) - Rare	Local, 87 records	2000	BWARS VC17
	Bee Wolf	<i>Philanthus triangulum</i>	IUCN (pre 1994) - Vulnerable	Ubiquitous, 338 records	1998	SBIC - Other Records
	a solitary bee	<i>Andrena flosa</i>	IUCN (pre 1994) - Rare	Locally Very Common	2000	BWARS VC17
	a nomad or mason bee	<i>Nomada baccata</i>	Nationally Notable A	Locally Common	1998	BWARS VC17
	6-Banded Nomad Bee	<i>Nomada fulvicornis</i>	IUCN (pre 1994) - Rare	Common	1998	BWARS VC17
	Woodcock	<i>Scolopax rusticola</i>	BOCC3 - Amber	Locally common breeding resident	1993	SBIC - Other Records
	Nightjar	<i>Caprimulgus europaeus</i>	BOCC3 - Red	Locally common summer visitor, breeding annually	2006	SWT - Nature Reserve / Open Space
	Kingfisher	<i>Alcedo atthis</i>	BOCC3 - Amber	Moderately common breeding resident	2011	SWT - Nature Reserve / Open Space
	Woodlark	<i>Lullula arborea</i>	BOCC3 - Red	Locally common breeding resident	2006	SWT - Nature Reserve / Open Space
	Dartford Warbler	<i>Sylvia undata</i>	BOCC3 - Amber	Locally common breeding resident	2006	SWT - Nature Reserve / Open Space
	Linnet	<i>Linaria cannabina</i>	BOCC3 - Red	Locally common breeding resident	2006	SWT - Nature Reserve / Open Space

In addition to the information presented above, SBIC currently holds information on the following species recorded from the ten kilometre squares which cover the one kilometre search area. These records are not currently held in a format which allows analysis at the same level of detail as other species records, however these records are included in this report as they provide a guide to the species which may be present within the wider search area.

10Km Grid Square	Taxon Common Name	Recommended Taxon Name	National Species Status	Surrey Status	Date Last Recorded	Source of Record
SU95	a liverwort	<i>Lophocolea brookwoodiana</i>	Nationally Rare		2012	British Bryological Society VC17
	Brilliant Emerald	<i>Somatochlora metallica</i>	IUCN (2001) - Vulnerable	60 tetrads, Confirmed, Local	1994	British Dragonfly Society VC17
	Red Kite	<i>Milvus milvus</i>	BOCC3 - Amber	Lost resident, now a scarce but increasing passage migrant	2005	SBIC - Other Records

5.0 UK Biodiversity Action Plan – Priority Species

The following species which appear on the revised list of UKBAP Priority species have been recorded from the one kilometre squares falling within the one kilometre search area. Once again, the following table lists species by one kilometre square and then by taxonomic order. For more information please see Annex D.

1Km Grid Square	Taxon Common Name	Recommended Taxon Name	Biodiversity Action Plan Species (2007)	Date Last Recorded	Source of Record
SU9651	Forester	<i>Adscita statice</i>	UK BAP Priority Species	2009	SWT - Nature Reserve / Open Space
	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	-1992	SBIC - Other Records
	Common Toad	<i>Bufo bufo</i>	UK BAP Priority Species	1990	SBIC - Other Records
	Turtle Dove	<i>Streptopelia turtur</i>	UK BAP Priority Species	-1993	British Trust for Ornithology
	Cuckoo	<i>Cuculus canorus</i>	UK BAP Priority Species	-1993	British Trust for Ornithology
	House Sparrow	<i>Passer domesticus</i>	UK BAP Priority Species	-1993	British Trust for Ornithology
	Yellowhammer	<i>Emberiza citrinella</i>	UK BAP Priority Species	-1993	British Trust for Ornithology
	Reed Bunting	<i>Emberiza schoeniclus</i>	UK BAP Priority Species	-1993	British Trust for Ornithology
	Water Vole	<i>Arvicola amphibius</i>	UK BAP Priority Species	2002	Surrey Mammal Group
SU9652	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	2005	SWT - Nature Reserve / Open Space
	Common Toad	<i>Bufo bufo</i>	UK BAP Priority Species	2005	SWT - Nature Reserve / Open Space
	Water Vole	<i>Arvicola amphibius</i>	UK BAP Priority Species	2000	Surrey Mammal Group
SU9653	Pennyroyal	<i>Mentha pulegium</i>	UK BAP Priority Species	1990	BSBI VC17
	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	1995	SBIC - Other Records
SU9751	Stag Beetle	<i>Lucanus cervus</i>	UK BAP Priority Species	1998	PTES National Stag Beetle Survey
	Grass Snake	<i>Natrix natrix</i>	UK BAP Priority Species	1990	Herpetiles - General
	Water Vole	<i>Arvicola amphibius</i>	UK BAP Priority Species	2000	Surrey Mammal Group
SU9752	Stag Beetle	<i>Lucanus cervus</i>	UK BAP Priority Species	1998	PTES National Stag Beetle Survey

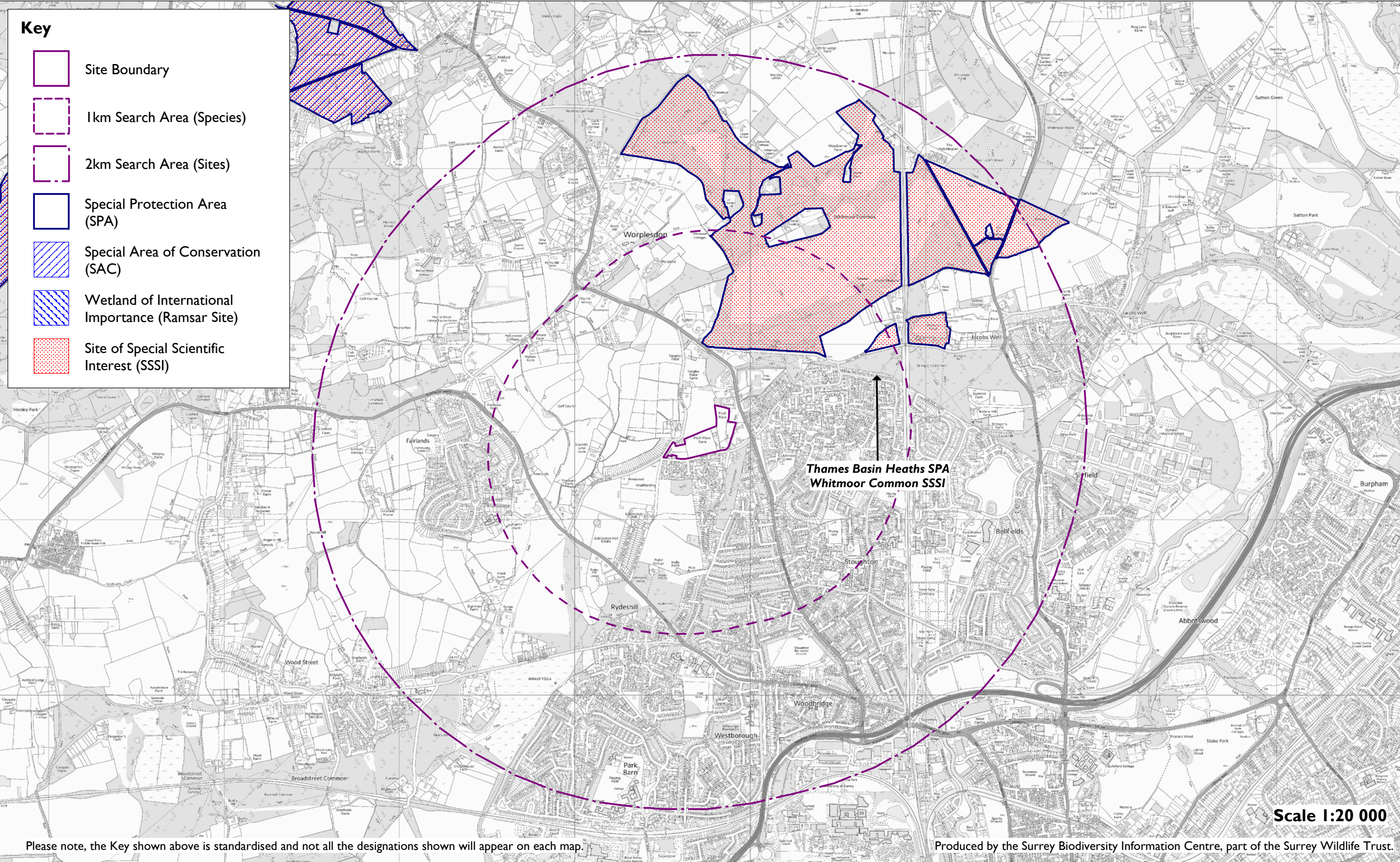
	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	2009	SWT - Nature Reserve / Open Space
SU9753	Chamomile	<i>Chamaemelum nobile</i>	UK BAP Priority Species	2009	BSBI VC17
	Stag Beetle	<i>Lucanus cervus</i>	UK BAP Priority Species	1998	PTES National Stag Beetle Survey
	Window Winged Sedge	<i>Hagenella clathrata</i>	UK BAP Priority Species	2015	SWT - Nature Reserve / Open Space
	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	2010	SWT - Nature Reserve / Open Space
	Nightjar	<i>Caprimulgus europaeus</i>	UK BAP Priority Species	2006	SWT - Nature Reserve / Open Space
	Grass Snake	<i>Natrix natrix</i>	UK BAP Priority Species	2015	SWT - Nature Reserve / Open Space
	West European Hedgehog	<i>Erinaceus europaeus</i>	UK BAP Priority Species	2009	SWT - Otters & Rivers Project
SU9851	Stag Beetle	<i>Lucanus cervus</i>	UK BAP Priority Species	1998	PTES National Stag Beetle Survey
	Hedgehog	<i>Erinaceus europaeus</i>	UK BAP Priority Species	1999	Surrey Mammal Group
	Brown Long-Eared Bat	<i>Plecotus auritus</i>	UK BAP Priority Species	1998	Mammals - General
SU9852	Stag Beetle	<i>Lucanus cervus</i>	UK BAP Priority Species	1998	PTES National Stag Beetle Survey
	Great Crested Newt	<i>Triturus cristatus</i>	UK BAP Priority Species	-1992	SBIC - Other Records
	West European Hedgehog	<i>Erinaceus europaeus</i>	UK BAP Priority Species	2006	SBIC - Other Records
	Hedgehog	<i>Erinaceus europaeus</i>	UK BAP Priority Species	1998	Surrey Mammal Group
SU9853	Window Winged Sedge	<i>Hagenella clathrata</i>	UK BAP Priority Species	2017	SWT - Nature Reserve / Open Space
	Silver-studded Blue	<i>Plebejus argus</i>	UK BAP Priority Species	2012	SWT - Nature Reserve / Open Space
	White Admiral	<i>Limenitis camilla</i>	UK BAP Priority Species	1995	SBIC - Other Records
	Nightjar	<i>Caprimulgus europaeus</i>	UK BAP Priority Species	2006	SWT - Nature Reserve / Open Space
	Woodlark	<i>Lullula arborea</i>	UK BAP Priority Species	2006	SWT - Nature Reserve / Open Space
	Slow-worm	<i>Anguis fragilis</i>	UK BAP Priority Species	2015	SWT - Nature Reserve / Open Space
	Common Lizard	<i>Zootoca vivipara</i>	UK BAP Priority Species	2015	SWT - Nature Reserve / Open Space

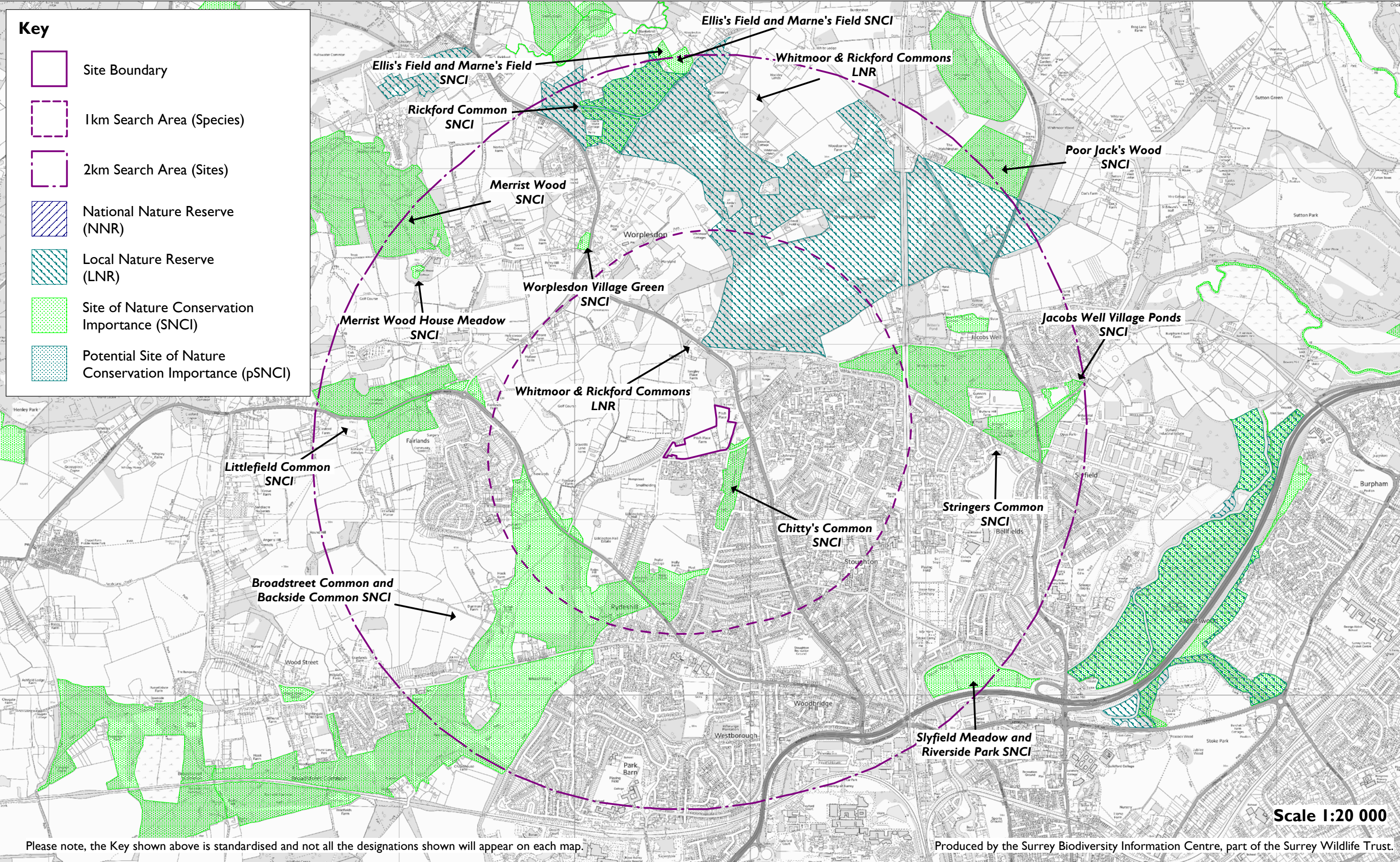
	Grass Snake	<i>Natrix natrix</i>	UK BAP Priority Species	2014	SWT - Nature Reserve / Open Space
	Adder	<i>Vipera berus</i>	UK BAP Priority Species	2009	SWT - Nature Reserve / Open Space
	Water Vole	<i>Arvicola amphibius</i>	UK BAP Priority Species	2000	Surrey Mammal Group

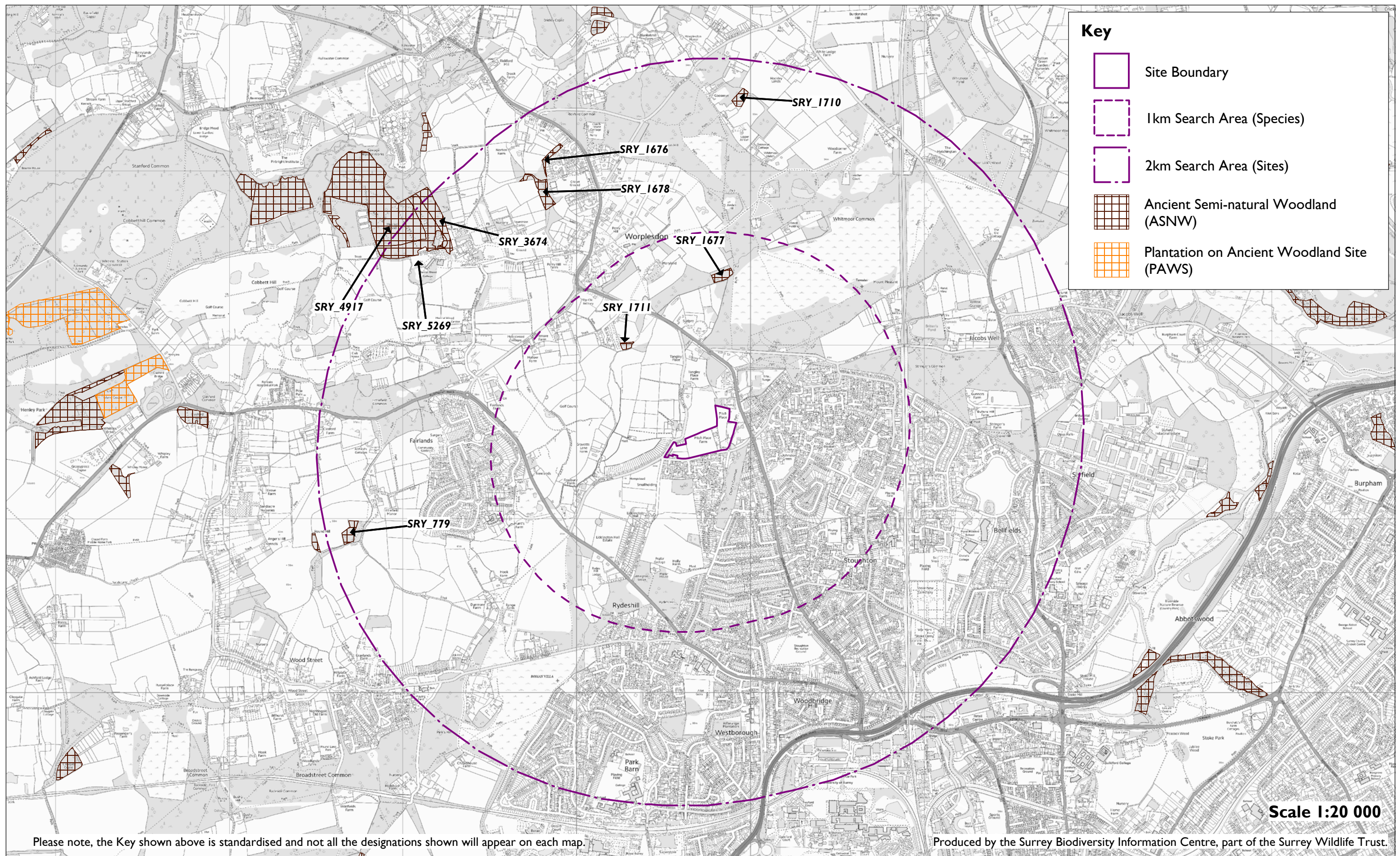
In addition to the information presented above, SBIC currently holds information on the following species recorded from the ten kilometre squares which cover the one kilometre search area. These records are not currently held in a format which allows analysis at the same level of detail as other species records, however these records are included in this report as they provide a guide to the species which may be present within the wider search area.

10Km Grid Square	Taxon Common Name	Recommended Taxon Name	Biodiversity Action Plan Species (2007)	Date Last Recorded	Source of Record
SU95	Brown Long-eared Bat	<i>Plecotus auritus</i>	UK BAP Priority Species	2008	BCT Bechstein's Bat Project

Annex A – Site Maps





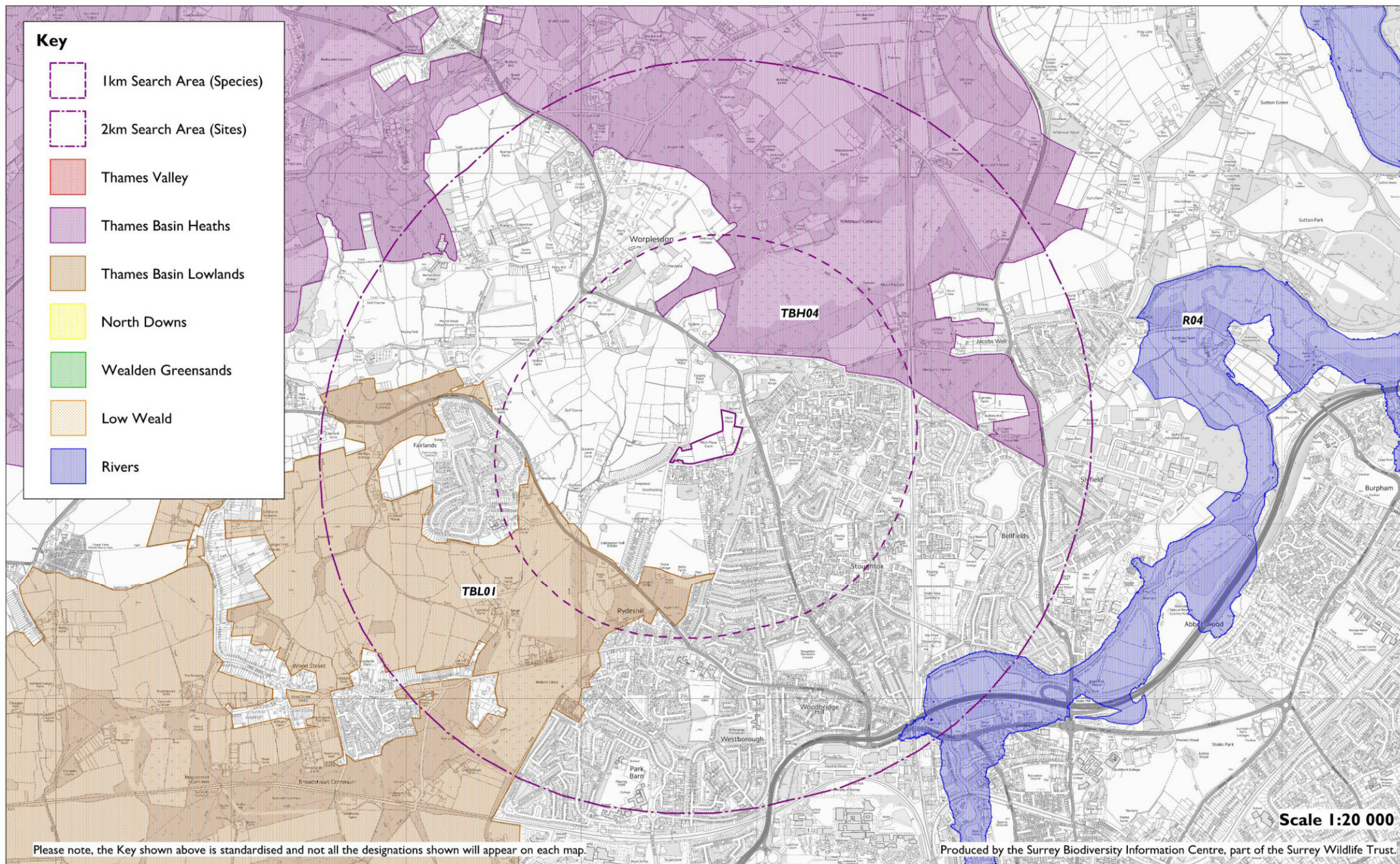


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April 2018

Background Ecological Data Search; Land North of Keens Lane, Guildford Revised Ancient Woodland - Inventory





Annex B – SSSI Citations

COUNTY: SURREY

SITE NAME: WHITMOOR COMMON

DISTRICT: GUILDFORD, WOKING

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

Local Planning Authority: GUILDFORD BOROUGH COUNCIL, WOKING BOROUGH COUNCIL

National Grid Ref: SU 985 535

Area: 164.1 ha, 405.3 acres

Ordnance Survey Sheets 1:50,000: 186

1:10,000: SU 95 SE

Date notified (under 1949 Act): 1955

Date of last revision: 1975

Date notified (under 1981 Act): 1985

Date of last revision: 1993

Other Information: This site forms part of Thames Basin Heaths proposed Special Protection Area for Birds (pSPA), proposed for designation under the European Commission Directive 79/409 on the Conservation of Wild Birds (the Birds Directive). It is managed as a public open space by Surrey County Council.

Reasons for Notification

Whitmoor Common is an extensive area of London Basin heathland characteristic of the soils of the Bagshot and Bracklesham Beds. The site contains a range of heathland habitats, as well as areas of woodland, grassland, and both standing and running water. A mosaic of wet heath and acidic grassland dominates the open areas. There is also an extensive area of dry heath as well as smaller stands of bracken and neutral grassland. Approximately half the site is covered with woodland, which varies in its age and composition. This site is the location of a rare spider, a scarce beetle, and two plants which occur only rarely in Surrey. It supports many characteristic heathland birds, including a strong breeding population of nightjar *Caprimulgus europaeus*, a bird listed on Annexe 1 of the Birds Directive.

Heathland

The drier areas of heath in the south and east are dominated by heather *Calluna vulgaris*, with bell heather *Erica cinerea*, dwarf gorse *Ulex minor*, wavy hair-grass *Deschampsia flexuosa* and common bent grass *Agrostis tenuis*. To the north west, impeded drainage has given rise to wet heath and acidic grassland communities consisting of heather, cross-leaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea*, tufted hair-grass *Deschampsia cespitosa* and the moss *Polytrichum commune*. Boggy depressions which occur within the area of wet heath are dominated by *Sphagnum* moss. Several characteristic plants occur in the areas of wet heath. These include bog asphodel *Narthecium ossifragum*, bog pimpernel *Anagallis tenella*, round-leaved sundew *Drosera rotundifolia*, white beak-sedge *Rhynchospora alba*, and marsh club-moss *Lycopodiella inundata*. The marsh gentian *Gentiana pneumonanthe*, which has only one other location in Surrey, is also found in association with the wet heath community. In addition the areas of wet heath support several bryophytes (liverworts and mosses), amongst them *Calliargon cordifolium*, *Campylopus brevipilus*, *Riccia fluitans*, *Gladopodiella francisci* and *Hypnum imponens*. Scattered throughout the heathland is a scrub of gorse *Ulex europaeus*, broom *Sarothamnus scoparius* and birch *Betula* spp. A nationally scarce spider, *Oxyopes heterophthalmus* and a nationally scarce beetle *Hyperaspis pseudopustulata* also occur in the heathland areas.

Grassland

An area of short, dry grassland in the northern part of the Common supports a number of interesting and localised plants, including sheep's-bit *Jasione montana*, sand spurrey *Spergularia rubra*, little mouse-ear *Cerastium semidecandrum*, early hair-grass *Aira praecox* and silvery hair-grass *A. caryophyllaea*.

Woodland

Birch and pedunculate oak *Quercus robur* form the major woodlands, and there are also several stand of mature Scots pine *Pinus sylvestris*. The majority of the woodland is of recent origin, and has colonised areas which were formerly open heath. On poorly drained areas downy birch *B. pubescens*, tends to be dominant, whilst on drier ground silver birch, *B. pendula* predominates. The more establish woodlands are dominated by pedunculate oak which occurs together with both species of birch, hazel *Corylus avellans*, sycamore *Acer pseudoplatanus* and Scots pine. In the extreme west of the site there is a swamp of mature alder *Alnus glutinosa* and crack willow *Salix fragilis*, whilst grey willow *Salix cinerea* occurs in wet areas around the ponds and stream.

Water

The water areas at Whitmoor Common, totalling 3.6 hectares, include two ponds and several streams. Many unusual species have been recorded at Brittens pond (SU 990 531) including orange foxtail *Alopecurus aequalis*, many stalked spike rush *Eleocharis multicaulis*, bog stitchwort, *Stellaria alsine*, tubular water dropwort *Oenanthe fistulosa* and horned pondweed *Zannichellia palustris*. Although the populations of these plants have declined as a result of clearance of reedmace *Typha latifolia* in 1971, recovery is highly likely given suitable management. The other pond (SU 983 539) is dominated by a tall fen vegetation of rushes *Juncus* spp., reedmace and sallow scrub. The streams contain pond water-crowfoot *Ranunculus peltatus* and contribute to the wetland communities at times of flooding.

Birds

The diverse habitats within the site, particularly the open heath and scrub, provide ideal breeding areas for characteristic heathland bird species. Among these are nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea* and stonechat *Saxicola torquata*.

Whitmoor Common forms part of Thames Basin Heaths pSPA, which consists of a group of heathlands extending from Wisley in Surrey to Tadley in Hampshire and Bracknell in Berkshire, supporting nationally important populations of a number of bird species. These include nightjar and woodlark, both listed on Annex 1 of the Birds Directive as being rare and in need of protection. Thames Basin Heaths pSPA, taken as a whole, supports an estimated 9.2 and 29.4% respectively of the British breeding populations of nightjar and woodlark.

Nature Conservancy Council for England
ENGLISH NATURE
Site of Special Scientific Interest

Whitmoor Common Surrey

Site boundary (centre of line): — Hectares: 164.08

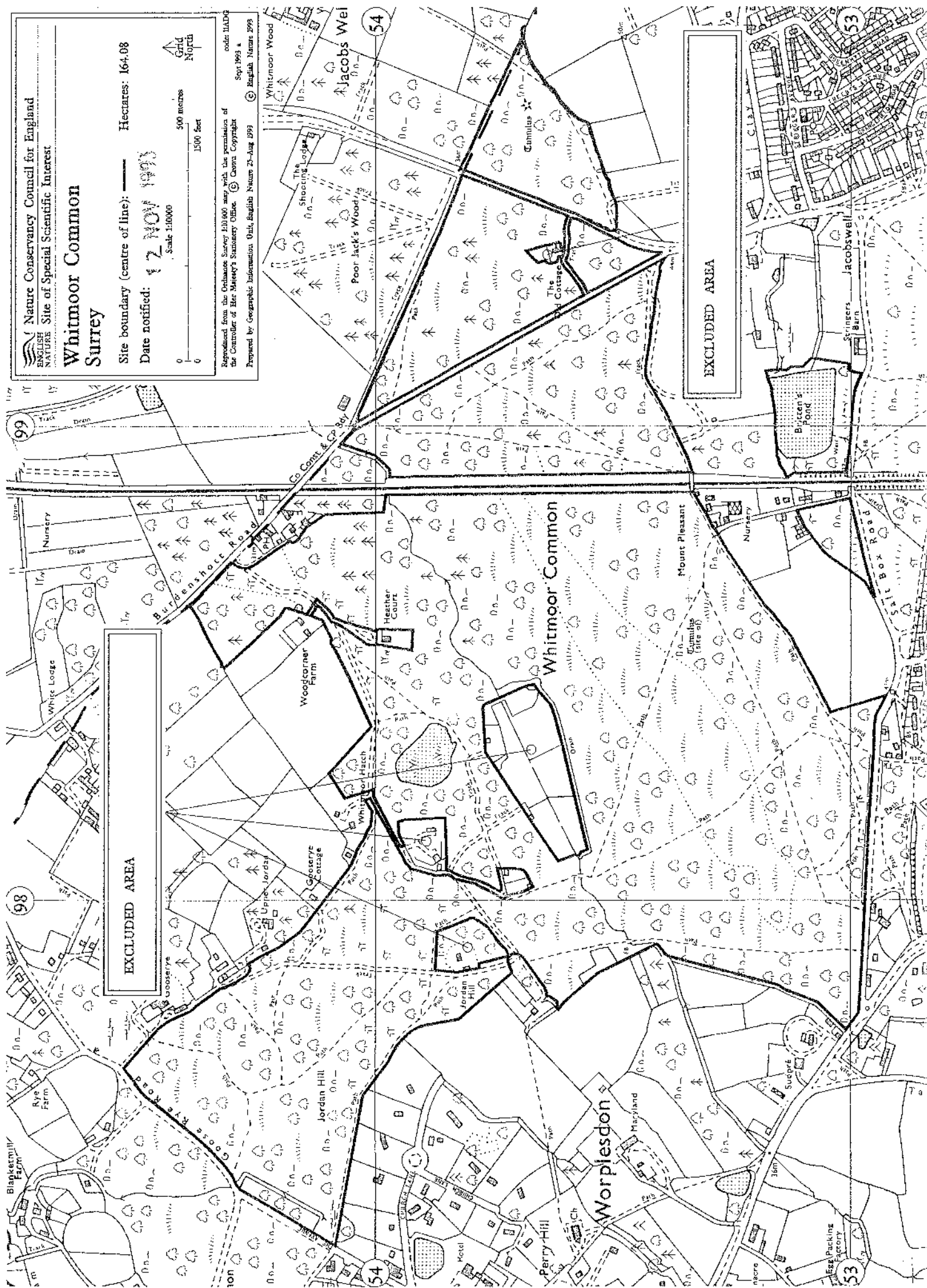
Date notified: 12 NOV 1993

Scale 1:10000

0 500 metres
0 1500 feet



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Prepared by Geographic Information Unit, English Nature 23-Aug-1993
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Annex C – Biodiversity Opportunity Area Statements

Surrey Biodiversity Opportunity Area Policy Statement

Biodiversity Opportunity Area TBH04: Ash, Brookwood & Whitmoor Heaths	
Local authorities: Guildford, Woking, Surrey Heath	
<p>Aim & justification</p> <p>The aim of Biodiversity Opportunity Areas (BOAs) is to establish a strategic framework for conserving and enhancing biodiversity at a landscape-scale, making our wildlife more robust to changing climate and socio-economic pressures. BOAs are those areas where targeted maintenance, restoration and creation of Natural Environment & Rural Communities (NERC) Act 'Habitats of Principal Importance', ie. Priority habitats will have the greatest benefit towards achieving this aim.</p> <p>Recognition of BOAs directly meets National Planning Policy Framework policy for the planning system to contribute to international commitments for halting the overall decline in biodiversity, by establishing coherent ecological networks that are more resilient to current and future pressures (para. 109). Designation of BOAs in local plans will also fulfil NPPF requirements to plan for biodiversity at a landscape-scale across local authority boundaries; and identify & map components of the local ecological networks (para. 117).</p> <p>Explanatory</p> <p>BOAs identify the most important areas for wildlife conservation remaining in Surrey and each include a variety of habitats, providing for an 'ecosystem approach' to nature conservation across and beyond the county. By working with larger, more dynamic ecosystems, it will be possible to create a wider range of habitats and their variants, which will in turn increase the ability of the landscape to support the largest variety of species.</p>	
<p>1. Overview</p> <p>This Biodiversity Opportunity Area includes extensive heaths and commons south and east of the Basingstoke Canal, from the Ministry of Defence Ash Ranges at its western end through to Smarts Heath and Whitmoor Common in the east. A large section is internationally designated as part of the Thames Basin Heaths Special Protection Area. The BOA meets R03 (Blackwater River) at Mytchett and R04 (River Wey & tributaries) at Mayford. Area: 3944.9 ha</p>	
<p>2. National Character Areas</p> <p>Thames Basin Heaths (NCA 129), Thames Basin Lowlands (NCA 114; marginal)</p>	
<p>3. Profile</p> <p>3.1 Geology</p> <p>Bagshot Sands, Sand & Gravel, River Terrace Deposits. Undulating plateau deeply dissected by a branching mire system, falling sharply from a maximum height of 116m at Romping Down to the Blackwater valley in the west and more gently towards the Wey floodplain in the east</p> <p>3.2 Biodiversity</p> <p>3.2.1 Statutory protected sites</p> <p>Natura 2000 (SPA/SAC): Thames Basin Heaths SPA; Thursley, Ash, Pirbright and Chobham SAC</p> <p>SSSI: Ash to Brookwood Heaths; Whitmoor Common; Smarts & Prey Heaths; Basingstoke Canal (part)</p> <p>LNR: Fox Corner Wildlife Area; Whitmoor & Rickford Commons</p> <p>3.2.2 Local Sites</p> <p>SNCI: 33</p> <p>Important Bird Area/Important Plant Area: Thames Basin Heath(land)s (Birdlife/Plantlife)</p> <p>3.2.3 NERC Act S.41</p> <p>Habitats of Principal Importance (Priority habitats):</p> <p>Heathland, Acid grassland, Mixed deciduous woodland, Wet woodland, Arable field margins, Standing open water</p> <p>Species of Principal Importance (Priority species):</p> <p>Plants: Chamomile, Copse-bindweed, Coral necklace, Glandular eyebright, Marsh clubmoss*, Marsh stitchwort, Pillwort*, Small fleabane*, Tubular water-dropwort; Large-celled flapwort, Pitted frillwort, Veilwort (all liverworts)</p>	

* probably extinct in BOA

Surrey Biodiversity Opportunity Area Policy Statement

Fungi/Lichens: Bearded tooth, Zoned tooth (both fungi)
Invertebrates: Grayling, Silver-studded blue, Small heath, White admiral, White-letter hairstreak, Argent-&-sable, Goat moth, Heart moth, Heath tiger-beetle, Dark guest ant, Shining guest ant, Erratic ant, Long-horned mining bee, Tormontil mining bee, Mottled bee-fly, Silky gallows-spider, Window-winged sedge (a caddis-fly)
Vertebrates: Bullfinch, Cuckoo, Dunnock, Lapwing, Lesser redpoll, Lesser spotted woodpecker, Linnet, Nightjar, Marsh tit, Skylark, Song thrush, Spotted flycatcher, Reed bunting, Tree pipit, Willow tit*, Woodlark, Yellowhammer; Adder, Common lizard, Grass snake, Sand lizard, Slow-worm, Smooth snake, Common toad, Great crested newt; Brown long-eared bat, Harvest mouse, Hedgehog, Noctule bat, Soprano pipistrelle bat, Water vole*

3.2.4 Further important species interest: Allseed, Bog-myrtle, Bog pimpernel, Bristle club-rush, Corn marigold, Floating club-rush, Horned pondweed, Many-stalked spike-rush, Marsh gentian, Marsh St John's-wort, Marsh violet, Meadow thistle, Mousetail, Oblong-leaved sundew, Petty-whin, Sheep's-bit, Silver hair-grass, Slender cottongrass, White sedge, White beak-sedge, Blushing bog-moss, Compact swan-neck moss, Pellucid plait-moss, Slender smoothcap (a moss); Golden-tabbed robberfly, *Myopa fasciata* (a thick-headed fly), Bog bush-cricket, Small red damselfly, *Oxyopes heterophthalmus* (a lynx spider), *Hyperaspis pseudopustulata* (a ladybird), *Erioptera neilsei* (a crane fly), *Mimumesa spooneri* (a solitary wasp); Dartford warbler, Hobby; Brook lamprey

3.2.5 Ancient woodland: present, including PAWS

3.2.6 Landscape scale conservation activity: Surrey Wildlife Trust Grazing Project; Surrey Countryside Partnerships team (Heathland Project); Blackwater Valley Countryside Partnership

3.3 Archaeology

Linear boundary on Whitmoor Common; Disc Barrow on Whitmoor Common

3.4 Access

3.4.1 Publically-accessible Natural OS: Greatbottom Flash, Mytchett Lake (Basingstoke Canal Authority); West Heath, Bowling Hill, Gravelpit-Normandy Hill/Wyke Common, Dawney's Hill-Pirbright Common, Bullswater Common (Guildford BC); Brookwood Cemetery; Smarts Heath, Prey Heath (Woking BC); Frimley Lodge Park (Surrey Heath BC); Fox Corner Wildlife Area; Rickford Common, Whitmoor Common, Stringer's Common, Britten's Pond (SyWT/SCC)

3.4.2 Long-distance PROW, etc: The Fox Way (Link 6)

3.5 Key ecosystem services

Agricultural production; Timber production; Carbon sequestration; Flooding regulation; Pollination services; Human decomposition; Defence training; Recreational (walking, equestrian, mountain-biking, golf, angling, bird-watching); Spiritual uses

3.6 Socio-Economic

3.6.1 Employment profile: Armed forces (Army); Agriculture & silviculture sector; Equine livery & services; Leisure sector (golf, equestrian); Research and higher education

3.6.2 LEP: Enterprise M3

4. Objectives & Targets

TBH04/O1: SSSI units to achieve favourable condition. **T1:** 50% by 2020 (by area)

TBH04/O2: SNCI protected by planning policy & in positive management. **T2:** All by 2020

TBH04/O3: Priority habitat restoration & creation.

- **Heathland/T3a:** 26.5 ha by 2020
- **Acid grassland/T3b:** 24.25 ha by 2020
- **Wet woodland/T3c:** 5 ha by 2020
- **Mixed deciduous woodland**
(restoration only; Ancient woodland prioritised)/**T3d:** 75% by area

TBH04/O4: Priority species recovery.

- **T4:** By 2020, evidence of at least stabilisation & preferably recovery in the local populations of listed Priority species:

Chamomile

Small fleabane

Window-winged sedge

Smooth snake

Marsh clubmoss

Veilwort

Nightjar

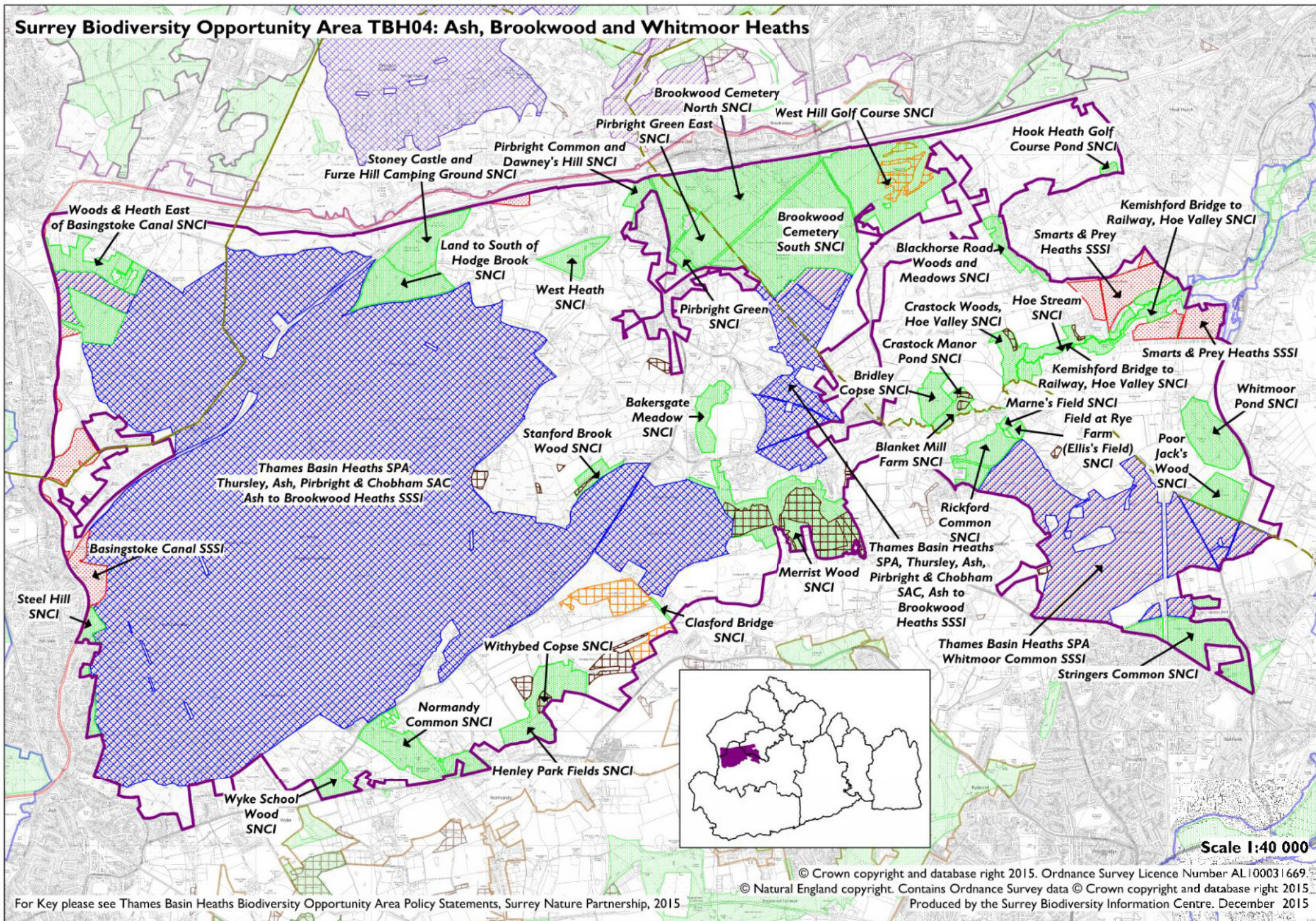
Sand lizard

Pillwort

Heath tiger-beetle

Woodlark

Surrey Biodiversity Opportunity Area TBH04: Ash, Brookwood and Whitmoor Heaths



Surrey Biodiversity Opportunity Area Policy Statement

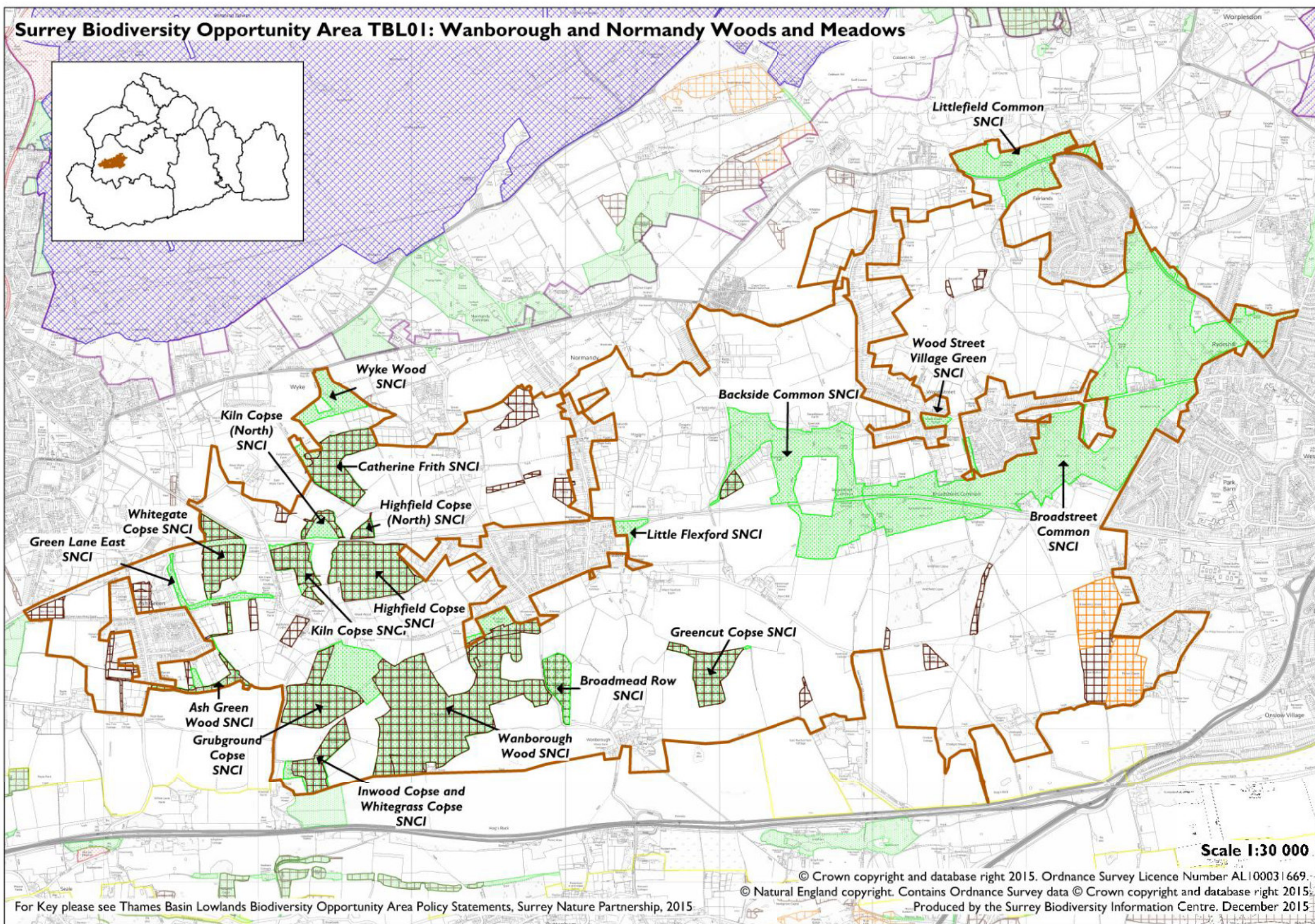
Biodiversity Opportunity Area TBL01: Wanborough & Normandy Woods & Meadows	
Local authorities: Guildford	
<p>Aim & justification</p> <p>The aim of Biodiversity Opportunity Areas (BOAs) is to establish a strategic framework for conserving and enhancing biodiversity at a landscape-scale, making our wildlife more robust to changing climate and socio-economic pressures. BOAs are those areas where targeted maintenance, restoration and creation of Natural Environment & Rural Communities (NERC) Act 'Habitats of Principal Importance', ie. Priority habitats will have the greatest benefit towards achieving this aim.</p> <p>Recognition of BOAs directly meets National Planning Policy Framework policy for the planning system to contribute to international commitments for halting the overall decline in biodiversity, by establishing coherent ecological networks that are more resilient to current and future pressures (para. 109). Designation of BOAs in local plans will also fulfil NPPF requirements to plan for biodiversity at a landscape-scale across local authority boundaries; and identify & map components of the local ecological networks (para. 117).</p> <p>Explanatory</p> <p>BOAs identify the most important areas for wildlife conservation remaining in Surrey and each include a variety of habitats, providing for an 'ecosystem approach' to nature conservation across and beyond the county. By working with larger, more dynamic ecosystems, it will be possible to create a wider range of habitats and their variants, which will in turn increase the ability of the landscape to support the largest variety of species.</p>	
<p>1. Overview</p> <p>This Biodiversity Opportunity Area consists largely of an enclosed system of small fields, hedgerows and ditches, variably sized ancient woodlands and small surviving commons, situated between Ash Green in the west and Broadstreet Common on the outskirts of Guildford in the east. It is adjacent to ND01 (Hog's Back) along much of the southern boundary. Area: 1597.3 ha</p>	
<p>2. National Character Areas</p> <p>Thames Basin Lowlands (NCA 114), North Downs (NCA 119; marginal), Thames Basin Heaths (NCA 129; marginal)</p>	
<p>3. Profile</p> <p>3.1 Geology</p> <p>London Clay, Bagshot Sands, Blackheath Beds, Chalk. Rolling clay plain, gently rising to the foot of the Hog's Back (North Downs ridge) in the south</p> <p>3.2 Biodiversity</p> <p>3.2.1 Statutory protected sites -</p> <p>3.2.2 Local Sites</p> <p>SNCI: 19</p> <p>3.2.3 NERC Act S.41</p> <p>Habitats of Principal Importance (Priority habitats):</p> <p>Mixed deciduous woodland, Wet woodland, Meadows, Arable field margins, Hedgerows, Ponds</p> <p>Species of Principal Importance (Priority species):</p> <p>Plants: Chamomile, Copse-bindweed, Glandular eyebright, Red-tipped cudweed*, Small fleabane</p> <p>Invertebrates: White-letter hairstreak, Small heath, White admiral, Forester (a moth), Stag beetle</p> <p>Vertebrates: Bullfinch, Corn bunting*, Cuckoo, Dunnock, Lapwing, Linnet, Skylark, Song thrush, Tree sparrow*, Turtle dove*, Yellowhammer; Common lizard, Grass snake, Slow-worm, Common toad, Great crested newt; Brown long-eared bat, Common dormouse, Hedgehog, Noctule bat, Soprano pipistrelle bat, Water vole*</p> <p>3.2.4 Further important species interest: Corky-fruited water-dropwort, Greater butterfly-orchid, Green-winged orchid, Lesser marshwort, Water-violet; Alder-tongue (a fungus); Purple emperor; Nightingale*</p>	

* probably extinct in BOA

Surrey Biodiversity Opportunity Area Policy Statement

<p>3.2.5 Ancient woodland: present, including PAWS</p> <p>3.2.6 Landscape scale conservation activity: Blackwater Valley Countryside Partnership; Surrey Wildlife Trust</p> <p>3.3 Archaeology Romano-Celtic Temple complex west of Long Common</p> <p>3.4 Access</p> <p>3.4.1 Publically-accessible Natural OS: Broadstreet & Backside Commons, Littlefield Common (Surrey Wildlife Trust/Surrey County Council)</p> <p>3.4.2 Long-distance PRoW, etc: The Fox Way (Link 6); Ash Green Lane East</p> <p>3.5 Key ecosystem services Agricultural production; Timber production; Flooding regulation; Pollination services; Recreational (walking, equestrian, angling)</p> <p>3.6 Socio-Economic</p> <p>3.6.1 Employment profile: Agriculture and silviculture sector; Equine livery & services; Leisure sector (esp. equestrian)</p> <p>3.6.2 LEP: Enterprise M3</p>	
<p>4. Objectives & Targets</p> <p>TBL01/O1: SNCI protected by planning policy & in positive management. T1: All by 2020</p> <p>TBL01/O2: Priority habitat restoration & creation.</p> <ul style="list-style-type: none"> • Meadows/T2a: 5.25 ha by 2020 • Mixed deciduous woodland (restoration only; Ancient woodland prioritised)/T2b: 75% by area • Wet woodland/T2c: 2 ha by 2020 • Hedgerows/T2d: 2.25 km by 2020 <p>TBL01/O3: Priority species recovery.</p> <ul style="list-style-type: none"> • T3: By 2020, evidence of at least stabilisation & preferably recovery in the local populations of listed Priority species: <div style="display: flex; justify-content: space-around; width: 100%;"> Chamomile Small fleabane Great crested newt </div> 	

Surrey Biodiversity Opportunity Area TBL01: Wanborough and Normandy Woods and Meadows



Scale 1:30 000

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For Key please see Thames Basin Lowlands Biodiversity Opportunity Area Policy Statements, Surrey Nature Partnership, 2015

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Biodiversity Opportunity Area R04: River Wey (& tributaries)	
<p>Local authorities: Elmbridge, Guildford, Mole Valley, Runnymede, Surrey Heath, Waverley, Woking</p>	
<p>Aim & justification:</p> <p>The aim of Biodiversity Opportunity Areas (BOAs) is to establish a strategic framework for conserving and enhancing biodiversity at a landscape-scale, making our wildlife more robust to changing climate and socio-economic pressures. BOAs are those areas where targeted maintenance, restoration and creation of Natural Environment & Rural Communities (NERC) Act 'Habitats of Principal Importance', ie. Priority habitats will have the greatest benefit towards achieving this aim.</p> <p>Recognition of BOAs directly meets National Planning Policy Framework policy for the planning system to contribute to international commitments for halting the overall decline in biodiversity, by establishing coherent ecological networks that are more resilient to current and future pressures (para. 109). Designation of BOAs in local plans will also fulfil NPPF requirements to plan for biodiversity at a landscape-scale across local authority boundaries; and identify & map components of the local ecological networks (para. 117).</p> <p>Explanatory</p> <p><i>BOAs identify the most important areas for wildlife conservation remaining in Surrey and each include a variety of habitats, providing for an 'ecosystem approach' to nature conservation across and beyond the county. By working with larger, more dynamic ecosystems, it will be possible to create a wider range of habitats and their variants, which will in turn increase the ability of the landscape to support the largest variety of species.</i></p>	
<p>1. Overview</p> <p>This Biodiversity Opportunity Area includes the River Wey, its major tributaries and associated Flood Zone 3 from the county boundary with Hampshire and West Sussex to its confluence with the River Thames. It shares adjacency with several other BOAs, including LW03, WG01-03, WG06, TBH03-06, TV04 and R06¹, as well as Hampshire BOA 17. Area: 3578 ha</p>	
<p>2. National Character Areas</p> <p>Low Weald (NCA 121), Wealden Greensands (NCA 120), North Downs (NCA 119), Hampshire Downs (NCA 130), Thames Basin Lowlands (NCA 114), Thames Basin Heaths (NCA 129), Thames Valley (NCA 115)</p>	
<p>3. Profile</p> <p>3.1 Geology</p> <p>The northern branch of the River Wey enters Surrey at Farnham and the southern branch at Frensham. It then drains much of the west of the county, crossing the Weald on its course north into the Thames Basin. Above and below the confluence of its two major source branches at Tilford it occupies a narrow, constrained floodplain which only widens significantly below Guildford. The Wey's natural course has been extensively modified especially in its lower reaches, where there is an additional engineered channel, the Wey Navigation. Important sub-catchments include the Cranleigh Waters, Tillingbourne-Law Brook, Hoe Stream and the Addlestone Bourne</p> <p>3.2 Biodiversity</p> <p>3.2.1 Statutory protected sites</p> <p>SSSI: Moor Park; Charleshill; Charterhouse to Eashing; Wey Valley Meadows; Papercourt</p> <p>LNR: Riverside Park, Mayford Meadows</p> <p>AONB: Surrey Hills</p> <p>3.2.2 Local Sites</p> <p>SNCI: 70[†]</p> <p>3.2.3 NERC Act S.41</p> <p>Habitats of Principal Importance (Priority habitats):</p> <p>Rivers, Floodplain grazing marsh, Ponds, Reedbeds, Wet woodland, Meadows, Purple moor-grass & rush pastures, Hedgerows</p> <p>Species of Principal Importance (Priority species):</p> <p>Plants: Brown galingale*, Cut-grass*, Greater water-parsnip*, Marsh stitchwort, Pennyroyal*, Sharp-leaved pondweed*, Tower mustard, Tubular water-dropwort</p>	

¹ Terrestrial BOAs take precedence where these overlap the Flood Zone 3 contour

* probably extinct in BOA

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Invertebrates: Goat moth, Orange upperwing*, White-spotted pinion* (moths), Flowering-rush weevil*, *Meotica anglica* (a river-shingle beetle), Oxbow diving-beetle, Pale pin-palp (a beetle), Sallow guest weevil, Two-tone reed beetle, Zircon reed beetle*, Hornet robberfly, Southern silver stiletto-fly, Southern yellow splinter (a crane fly), Mole cricket*, Desmoulin's whorl snail, Shining ram's-horn snail*, Iron blue mayfly, White-clawed crayfish

Vertebrates: Cuckoo, Dunnock, Grasshopper warbler*, Lapwing, Lesser spotted woodpecker, Reed bunting, Skylark, Song thrush, Spotted flycatcher, Tree sparrow*, Willow tit*, Yellow wagtail*, Yellowhammer; Grass snake, Common toad, Great crested newt; Barbastelle bat, Brown long-eared bat, Harvest mouse, Noctule bat, Otter, Soprano pipistrelle bat, Water vole; Brown trout, European eel

3.2.4 Further important species interest: Alternate-leaved golden-saxifrage, Bladder-sedge, Bottle sedge, Common meadow-rue, Early marsh-orchid, Hairlike pondweed, Ivy-leaved crowfoot, Large bittercress, Lesser water-parsnip, Marsh arrow-grass, Marsh cinquefoil, Marsh violet, Narrow-leaved water-dropwort, Red pondweed, River water-crowfoot, Slender tufted-sedge, Small teasel, Water-violet, White sedge, Whorl-grass; Dotted fan-foot, Lesser cream wave (both moths), Scarce chaser (a dragonfly), White-legged damselfly, *Gonomyia bifida*, *Lonchoptera scutellata*, *Stratiomys potamida* (all flies); Barn owl, Common snipe, Goosander, Grey wagtail, Kingfisher, Pochard, Redshank, Sand martin, Sedge warbler, Water rail, Wigeon; Water shrew; Brook lamprey, Bullhead

3.2.5 Ancient woodland: present, including PAWS

3.2.6 Landscape scale conservation activity: Wey Landscape Partnership (inc. Wey Diffuse Pollution Advice Project); Surrey Wildlife Trust Grazing Project

3.3 Archaeology

Brooklands Motor Racing Circuit (remains of the pre-WWII aerodrome, WWII Bofors Tower & shelters and Brooklands Memorial); Eashing Bridges; Frensham Manor; Newark Priory; Somerset Bridge; St Catherine's Chapel; Tylford Bridges; Waverley Abbey; Woking Palace; The Treadwheel Crane; Chilworth gunpowder works

3.4 Access

3.4.1 Publically-accessible Natural OS: Bishop's Meadow (Bishops Meadow Trust); Lammas Lands (Waverley Borough Council); Thundry Meadows, Papercourt Meadows, Manor Farm (Surrey Wildlife Trust); Shalford Park, Stoke Park-Riverside Park LNR, Parsonage Meadows (Guildford Borough Council); Mayford Meadows, Woking Palace (Woking Borough Council); Wey Navigation & Meadows (National Trust)

3.4.2 Long-distance PROW, etc: River Wey Navigation tow-path (inc. E2 European L-D Route); Wey South Path/Downs Link; North Downs Way; Greensand Way; The Fox Way (Link 7)

3.5 Key ecosystem services

Water provision (abstraction and waste); Agricultural/fisheries food production; Timber production; Carbon sequestration; Flooding regulation; Pollination services; Recreation (pleasure boating, walking, equestrian, cycling, canoeing/rowing, angling, golf, bird-watching)

3.6 Socio-Economic

3.6.1 Employment profile: Water industry; Agriculture/Horticulture sector; Equine livery & services; Game & coarse angling services; Boating and navigational services; Tourism & heritage visitor attractions

3.6.2 LEP: Enterprise M3

4. Objectives & Targets

R04/O1: SSSI units to achieve/maintain favourable condition. **T1:** 50% by 2020 (by area)

R04/O2: SNCI protected by planning policy & in positive management. **T2:** All by 2020

R04/O3: Priority habitat restoration & creation.

- **Floodplain grazing marsh/T3a:** 35.25 ha by 2020
- **Wet woodland/T3b:** 4.5 ha by 2020
- **Rivers** (in-channel/bankside habitat creation)/**T3c:** 10 km by 2020
- **Meadows/T3d:** 11.75 ha by 2020
- **Reedbeds/T3e:** 7 ha by 2020

R04/O4: Priority species recovery.

- **T4:** By 2020, evidence of at least stabilisation & preferably recovery in the local populations of listed Priority species:

Marsh stitchwort	White-clawed crayfish	Lapwing
Harvest mouse	Otter	Water vole
European eel		

Annex D – Protected and Rare/Notable Species Statuses (as at July 2011)

The following summary of national legislation, international agreements and conservation statuses is designed purely as a basic guide to the statuses displayed within Surrey Biodiversity Information Centre's Enquiry Service reports to aid developers, consultants and members of the public to make informed decisions. It is imperative that full details of all relevant legislation and definitions be consulted for all species when reviewing the list and before any action is taken.

Protected Species

Birds Directive 1979 (EC Directive 79/409 on the Conservation of Wild Birds)

The 'Birds Directive' was adopted in response to the 1979 Bern Convention on the conservation of European habitats and species. The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. In England the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") which in turn consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994, and are supported by a wide range of other statutory and non-statutory activities including the UK Biodiversity Action Plan which involves action for a number of bird species and the habitats which support them. See <http://www.jncc.gov.uk/page-1373> for more information.

Annex I - Birds which are the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. Species include those in danger of extinction; species vulnerable to specific changes in their habitat; species considered rare because of small populations or restricted local distribution; other species requiring particular attention for reasons of the specific nature of their habitat.

Habitats and Species Directive 1992 (Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora)

The 'Habitats Directive' aims to protect the wild plants, animals and habitats that make up the diverse natural environment of the European Community. It requires Member States to introduce a range of measures for the protection of habitats and species listed in its Annexes. Currently implemented within the UK by The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") which in turn consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994. It provides for the protection of 'European protected species' by making it an offence to deliberately kill, capture, or disturb them, or to damage or destroy their breeding sites or resting places. See <http://www.jncc.gov.uk/page-1374> for more information.

Annex II - Non-priority - Endangered animal and plant species that are of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) requiring the designation of special areas of conservation.

Annex II - Priority - Endangered animal and plant species requiring the designation of special areas of conservation (SAC) for which the European Community has a particular responsibility for conservation in view of the proportion of their natural range which falls within the territory of the Community.

Annex IV - Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) in need of strict protection. They are protected from killing, disturbance or the destruction of them or their habitat.

Annex V - Animal and plant species of community interest whose taking in the wild and exploitation may be subject to management measures.

Berne Convention 1979 (Convention on the Conservation of European Wildlife and Natural Habitats)

Designed to protect important population of listed species and their habitats. The Berne Convention places particular emphasis on migratory species and their breeding and resting sites.

Appendix 1 - Lists flora which are required to be specifically protected against deliberate picking, cutting, collecting, uprooting, possession, sale etc.

Appendix 2 - Lists strictly protected fauna. Listed fauna are required to be strictly protected against deliberate killing, capture, damage / destruction of breeding and nesting sites, disturbance, taking of eggs, trading (Including parts or derivatives), etc.

Appendix 3 - Listed in this Appendix are all animals not in Appendix 2 whose populations are required to be protected from exploitation (indiscriminate mass killing, trading and any means capable of causing local disappearance or serious disturbance to a species) and managed to keep them out of danger. The Appendix includes nearly all birds, and all other reptiles and amphibians and many other mammals.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act (WACA) 1981 (as amended) is the principle mechanism for the legislative protection of wildlife in Britain. It is the means by which the Bern Convention and the Birds Directive and Habitats Directive are implemented in Britain. Protected birds, animals

and plants are listed in Schedules 1, 5 and 8 respectively of the Wildlife and Countryside Act. See <http://www.jncc.gov.uk/page-3614> for more information.

Schedule 1 Part 1 - Birds which are protected by special penalties at all times from being intentionally killed, injured, or taken and whose eggs, nests or dependent young are also protected from being disturbed.

Schedule 5 Section 9 Part 1 (killing/injuring) - Animals which are protected from being intentionally killed or injured.

Schedule 5 Section 9 Part 1 (taking) - Animals which are protected from being taken.

Schedule 5 Section 9 Part 4a - Animals which are protected from intentional damage to, destruction of, or obstruction of access to any structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4b - Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4c - Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.

Schedule 8 - Plants and fungi which, subject to exceptions, are protected from: intentional picking, uprooting or destruction; selling, offering for sale, possessing or transporting for the purpose of sale; advertising for buying or selling.

Conservation of Habitats and Species Regulations 2010

The Conservation of Habitats and Species Regulations 2010 (the principal means by which the Habitats Directive is transposed in England) update the legislation and consolidate all the amendments which have been made to the Regulations since they were first made in 1994. Animals and plants that receive protection under The Conservation of Habitats and Species Regulations 2010 are commonly referred to as 'European Protected Species'.

On 21 August 2007 an amendment to the Habitats Regulations 1994 came into force which removed many of the legal defences surrounding these species, including acts which were the incidental result of a lawful operation and could not have been reasonably avoided (commonly known as the 'incidental result defence'). It is no longer a reasonable defence to show that the killing, capture or disturbance of a European

Protected Species, or the destruction or damage to their breeding sites or resting places, was the incidental or unavoidable result of an otherwise lawful activity.

Best practice guidance are available from Natural England to minimise the risks of committing an offence under the Regulations. Licences are also available from Natural England to allow persons to carry out activities that would otherwise be prohibited, without committing an offence in circumstances where best practice guidance either cannot be followed or is not applicable. See <http://www.naturalengland.org.uk/ourwork/regulation/wildlife/default.aspx> for more information.

Schedule 2 – European protected species of animals. It is an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2.

Schedule 5 – European protected species of plants. It is an offence (subject to exceptions) to pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5.

Rare / Notable Species

IUCN Red List

The World Conservation Union (IUCN) has been assessing the conservation status of species, subspecies, varieties and even selected subpopulations on a global scale in order to highlight taxa threatened with extinction, and therefore promote their conservation. The IUCN Red List, previously known as the Red Data Book (RDB), uses a set of criteria relevant to all species and all regions of the world to evaluate the extinction risk of thousands of species and subspecies. The IUCN Red List is recognized as the most authoritative guide to the status of biological diversity. See <http://www.iucnredlist.org/> for more information.

IUCN 2001

The IUCN Red List categories and criteria have undergone an extensive review in recent years. The revised categories and criteria (version 3.1) were adopted in 2000 and all new assessments and reassessments of taxa follow this revised system. Taxa using this classification currently consist only of subsets of higher and lower plants.

Extinct - Taxa where there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys (over a time frame appropriate to the taxon's life cycles and life form) in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual.

Extinct In The Wild - Taxa known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys (over a time frame appropriate to its life cycles and life form) in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual.

Critically Endangered - Taxa where the best available evidence indicates that it meets any of the IUCN criteria for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild (see http://www.iucnredlist.org/info/categories_criteria2001 for a full explanation).

Endangered - Taxa where the best available evidence indicates that it meets any of the IUCN criteria for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild (see http://www.iucnredlist.org/info/categories_criteria2001 for a full explanation).

Vulnerable - Taxa where the best available evidence indicates that it meets any of the IUCN criteria for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild (see http://www.iucnredlist.org/info/categories_criteria2001 for a full explanation).

Taxa categorised as either 'Critically Endangered', 'Endangered' or 'Vulnerable' are described as 'Threatened'.

Near Threatened - Taxa where it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

Data Deficient - Taxa where there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. Data Deficient is therefore not a category of threat, but it may be appropriate to give them the same degree of attention as threatened taxa, at least until their status can be assessed.

IUCN 1994

Assessments from 1996-2000 that have not been converted over to the revised system use the 1994 categories and criteria (version 2.3). Taxa using this classification currently only consist of a subset of Diptera (True Flies).

See IUCN 2001 for descriptions of the following categories:

- Extinct (EX)
- Extinct In The Wild (EW)
- Critically Endangered (CR)
- Endangered (EN)
- Vulnerable (VU)
- Data Deficient (DD)

Taxa categorised as either 'Critically Endangered', 'Endangered' or 'Vulnerable' are described as 'Threatened'.

Conservation Dependent - Taxa which are the focus of a continuing taxon-specific or habitat-specific conservation programme targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years.

Near Threatened - Taxa which do not qualify for Lower Risk (conservation dependent), but which are close to qualifying for Vulnerable. In Britain, this category includes species which occur in 15 or fewer hectads but do not qualify as Critically Endangered, Endangered or Vulnerable.

Taxa categorised as 'Conservation Dependent' or 'Near Threatened', i.e. do not satisfy the criteria for any of the threatened categories, are known as 'Lower Risk'.

IUCN Pre 1994

Superseded by new IUCN categories in 1994, but still applicable to lists that have not been reviewed since 1994. Taxa using this classification currently consist largely of invertebrates including many Coleoptera (Beetles), Trichoptera (Caddis Flies), Hymenoptera (Bees, Ants, Wasps and Sawflies), Hemiptera (True Bugs), Araneae (Spiders) and Mollusca (Molluscs).

Extinct - Taxa which are no longer known to exist in the wild after repeated searches of their localities and other known likely places.

Endangered - Taxa in danger of extinction and whose survival is unlikely if the causal factors continue operating.

Vulnerable - Taxa believed likely to move into the Endangered category in the near future if the causal factors continue operating.

Nationally Rare - Taxa with small populations that are not at present Endangered or Vulnerable, but are at risk. In Britain this was interpreted as species which exist in fifteen or fewer 10km squares.

Indeterminate - Taxa not seen since 1970 but require further survey before they can be declared Extinct, Endangered, Vulnerable or Rare, but where there is not enough information to say which of these categories is appropriate.

Insufficiently known - Taxa that are suspected but not definitely known to belong to any of the above categories (i.e. Endangered, Vulnerable, Rare), because of the lack of information.

Threatened endemic - Taxa which are not known to occur naturally outside Britain. Taxa within this category may also be in any of the other RDB categories or not threatened at all.

Rare and scarce species (not based on IUCN criteria)

Taxa which do not fall within the IUCN Red List categories but which are still uncommon in Great Britain. See <http://www.jncc.gov.uk/page-3425> for more information.

Nationally Rare - Taxa occurring in 15 or fewer 10km squares in Britain.

Nationally Scarce - Taxa occurring in 16-100 10km squares in Britain.

Nationally Notable - Taxa thought to occur within the range of 16 to 100 10km squares or, for less-well recorded groups less than twenty vice-counties. Superseded by Nationally Scarce, but may still be in use for some taxonomic groups.

Nationally Notable A - Taxa estimated to occur within 16-30 10-kilometre squares of the National Grid system.

Nationally Notable B - Taxa estimated to occur within 31-100 10 kilometre squares of the National Grid system.

Birds of Conservation Concern 3

Every five years the leading governmental and non-governmental conservation organisations in the UK, chaired by the RSPB, review the population status of the birds that are regularly found here to keep track of changes in abundance and range. For a more complete explanation of this listing see Eaton M.A., Brown A.F., Noble D.G., Musgrove A.J., Hearn R., Aebischer N.J., Gibbons D.W., Evans A. and Gregory R.D. (2009); Birds of Conservation Concern 3: The Population Status of Birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 102: 296-341.

Red - High Conservation Concern. Red list species are those that meet any of the following criteria. A) Global Conservation Status. Species listed by BirdLife International as being Globally Threatened using IUCN criteria. B) Historical Decline. A severe decline in the UK between 1800 and 1995, without substantial recent recovery. C) Breeding Population Decline. Severe decline in the UK breeding population size, of more than 50%, over 25 years or the entire period used for assessments since the first BOCC review, starting in 1969 ("longer-term"). D) Non-breeding Population Decline. Severe decline in the UK non-breeding population size, of more than 50%, over 25 years or the longer-term. E) Breeding Range Decline. Severe decline in the UK range, of more than 50%, as measured by number of 10 km squares occupied by breeding birds, over 25 years or the longer-term.

Amber - Medium Conservation Concern. Species meet any of the following criteria, but none of the red list criteria, are amber listed: A) European Conservation status. Categorized as a Species of European Conservation Concern (SPEC 1, 2 or 3). B) Historical Decline – Recovery. Red listed for Historical Decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years). C) Breeding Population Decline. As for red list criteria but with moderate decline (by more than 25% but less than 50%). D) Non-breeding Population Decline. As for red list criteria but with moderate decline (by more than 25% but less than 50%). E) Breeding Range Decline. As for red list criteria but with moderate decline (by more than 25% but less than 50%). F) UK breeding population of less than 300 pairs or non-breeding population of less than 900 individuals. G) Localisation. At least 50% of the UK breeding or non-breeding population found in 10 or fewer sites. H) International Importance. At least 20% of the European breeding or non-breeding population found in the UK.

Biodiversity Action Plans

The UK Biodiversity Action Plan (UK BAP) is the Government's response to the Rio Convention on Biological Diversity signed in 1992. It describes the UK's biological resources and commits a detailed plan for the protection of these resources. Action plans have been developed which set priorities for important wildlife species both nationally and locally within Surrey. The potential effects of any development on species listed as priorities in the UK BAP and by Local Biodiversity Partnerships are capable of being a material consideration in the preparation of regional spatial strategies and local development documents and the making of planning decisions. See <http://www.ukbap.org.uk/> for more information.

UK BAP Priority Species - Revised June 2007, this list describes the priority species that require urgent conservation action under the UK BAP as a result of being either globally threatened or rapidly declining in the UK (by more than 25% in the last 25 years). This list is an important reference source and will be the focus for conservation action across the UK over the next decade. For more information see Biodiversity Reporting and Information Group (2007), Report on the Species and Habitat Review – Report to the UK Biodiversity Partnership.

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