Wisley Airfield:

Site of Nature Conservation Importance (SNCI) Report

Contents

Summary

In 2007 the Wisley Airfield SNCI reasons for selection were recorded as: – *'This site is selected for its importance for **reptiles, plants and birds**. 9 notable Surrey plant species have been recorded on the site. In addition 3 RSPB red list birds species and 7 RSPB amber list birds species have been recorded on the site. This site has an exceptional population of Grass Snakes as well as supporting good populations of Slow-worms, Common Lizards and Common Frogs.'*

The following provides a summary of the evaluation of the site as surveyed in 2016 against the SNCI selection criteria. For information on the final decision of the Surrey Local Sites Partnership (LSP), please see the LSP minutes of 29th March 2017.

Assessment of Wisley Airfield 2007 reasons for SNCI selection using 2008 Guidelines for Surrey

24 Vascular Plants a) Supports one or more species included in the latest National Red Data List for plants.

- **Criteria met, for species found with a scattered distribution across Wisley Airfield and also Snakes Field.**

24 Vascular Plants d) Supports species identified by Surrey Botanical Society as rare and notable within Surrey.

- **Criteria met, for species found scattered distribution across Wisley Airfield and also Snakes Field.**

20 Reptiles b. Populations of 3 or more native reptile species.

- **Criteria met, reptile interest is confined to the western part of the site and the northern boundary.**

20 Reptiles d. Sites supporting an assemblage of species scoring at least 4 points using the scoring system in the SNCI Guidelines (Gibbs, 2008) can be considered for selection.

- **Criteria met, reptile interest is confined to the western part of the site and the northern boundary.**

Birds

- **Criteria not met, based on recent surveys supplied by GBC, the site does not currently meet the current SNCI guidelines for birds (Gibbs, 2008), see Appendix 2 for more information.**

Assessment of additional features of Wisley Airfield against SNCI selection using 2008 Guidelines for Surrey

1 Woodland e. Wet woodland falling within NVC types W1, W2, W4c, W5, W6 and W7.

- **Criteria met for Stratford Bridge Wood.**

4 Neutral Grassland b. Grassland sites, which support a high diversity of species typical of grassland of conservation interest in Surrey. As a guideline, site which support 15 or more of the species listed in Table 1 of the Guidance for the Selection of Sites of Nature Conservation Importance (SNCIs) in Surrey (Gibbs, 2008), including at least 2 of the species in bold are likely to be of SNCI quality.

- **Criteria met for Snakes Field.**
- **Criteria may be met with a restricted distribution in the western end of the runway.**

8 Standing Open Water c) Water bodies or clusters of water bodies which support a significant population of a species as discussed in the species guidance.

- **Criteria met for Pond 3.**

12 Open Mosaic Habitats on Previously Developed Land.
a) Open Mosaic habitat sites where;

- 6 or more of the characteristic features are found
- form part of a wider complex of similar areas, providing long term habitat opportunity
- There is a significant invertebrate assemblage

- **Criteria met for the western part of the site.**

13 Arable a, all sites which meet the criteria for Important Arable Plant Areas (IAPA), which are not covered by other designations.

- **Criteria is met as the IAPA score would suggest that Wisley Airfield is of UK / County Importance. The majority of the records have restricted, scattered distribution from the arable fields, runway and western end of the site.**

18 Mammals Bats c. Foraging sites not associated directly with roosts should be considered for selection if more than 5 species are regularly recorded there or if used by any Annex II species.

- **This suggests that the criteria has been met. The main areas of interest for bats are the western end and along the southern edge.**

19 Amphibians c. Supports populations of four or more native amphibian species.

Criteria met for Pond 3.

The site may also meet the SNCI selection guidelines under the following criteria

22 Invertebrates.

- **Further invertebrate survey work is recommended over several days during a full season by an experienced entomologist to fully ascertain the conservation status for Wisley Airfield for invertebrates.**

Guildford Borough SNCI Surveys 2016: Existing Site

Site Name:	**Wisley Airfield**
Recorder Number:	15043 (and 15051 & 70035)
SLSP Ref:	GU127
Grid Ref:	TQ 076 575
Parish:	Ockham
Ward:	Lovelace
Area of SNCI:	117.51ha
Previous SNCI surveys:	14th, 18th, 19th & 21st July 2006, Claire Gibbs
Date of current survey:	20th May, 9th June, 22nd June & 13th July 2016
Surveyors:	Isobel Girvan SWT *

Quality control

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the '*Guidelines for Preliminary Ecological Appraisal'* and '*Code of Professional Conduct'* issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

Wisley Airfield SNCI Report v1.2 (21 July 2017)		**Date**
Survey Ecologist	Isobel Girvan BSc (Hons) MCIEEM	Survey dates 20th May, 9th June, 22nd June & 13th July 2016
Report Author	Isobel Girvan BSc (Hons) MCIEEM	Date passed on for authorisation 14/12/2016 Revised 22/06/2017
Approved by	Claire Gibbs BSc (Hons) MSc MCIEEM Danial Winchester BSc (Hons) MCIEEM	Date authorised as complete 12/01/2017 Authorised as complete for amended report v1.2 21/07/2017

*The following survey was carried out by SWT on behalf of Guildford Borough Council. At the request of the land owner the SWT surveyor was accompanied by one of their Ecological Consultants, Andy Cross of EPR. However, this report represents the views of SWT.

Site description

Wisley Airfield Site of Nature Conservation Importance (SNCI) is located at Elm Corner, Ockham, south of the A3. Immediately to the north lies the Ockham and Wisley Common Site of Special Scientific Interest (SSSI) which forms part of the Thames Basin Heaths Special Protection Area (SPA). Other boundaries of the site consist of woodland (some owned by Surrey Wildlife Trust) and farmland with a small collection of houses south of Elm Lane.

The survey site comprises a disused airfield covering 123.1ha. A long derelict tarmac runway strip runs though the centre of the site from east to west, there is also a large area of concrete to the north of the site. A number of plants have invaded the tarmac and runway areas. Much of the land surrounding the runway consists of arable fields. In the north of the site lies Snakes Field, a semi-improved grassland (Gibbs, 2006).

The site sits on Higher Terrace geology, with Bagshot Beds to the north and Alluvium running along the Stratford Brook. This gives rise to a River Terrace called Hucklesbrook, a loamy, sandy soil.

The survey area for this report (see Figure 1) includes the current Wisley Airfield SNCI (including Snakes Field SWT) (see Figure 2) as well as an additional section of woodland to the south of the site called Stratford Bridge Wood, as this is within the land ownership.

The survey took place over four days and although the whole of the site was visited, additional time and effort was focused on the western section, no visits were made after July as site conditions meant that further surveys would be sub-optimal. As such, although every effort was made to locate all key and historic species, it has not been possible to make a definitive statement on their presence/ absence.

Previous reason for selection

Wisley Airfield was originally identified as a candidate SNCI in 1995 based on existing information from Surrey Flora Committee (now known as the Surrey Botanical Society), at that time it was not clear who the owners of the site were and as such no formal SNCI survey took place. However, the SNCI guidelines in use at the time did allow for sites to be considered using relevant information from a suitable alternative source, in this case the local recording group.

As such the western end of the site (see Figure 2) was considered based on information submitted by the Surrey Flora Committee and was selected as an SNCI on 31st October 1996. The reason for selection at that time was given as '*Recommended by JES (Joyce Smith – Surrey Flora Committee) for Heath Cudweed, Yellow Bartsia, Bee Orchid, Annual Knawel and Knotted Clover, all of which are rare in Surrey*.'

Guildford Borough SNCI Surveys 2016: Existing Site

In 2005 the wider part of Wisley Airfield, including SWT Snakes Field, was proposed and selected based on information provided by Surrey Amphibian and Reptile Group (SARG) for '*its exceptional populations of reptiles and amphibians*.' See Figure 2.

Then in 2006 SWT were specifically asked by Guildford Borough Council to investigate the nature conservation interest of a number of sites within/adjacent to Wisley Airfield. As a result further changes to the SNCI boundaries were made (see Figure 2) and adopted in 2007. At this time the reason for selection was given as '*This site is selected for its importance for reptiles, plants and birds. 9 notable Surrey plant species have been recorded on the site. In addition 3 RSPB red list bird species and 7 RSPB amber list bird species have been recorded on the site. This site has an exceptional population of Grass Snakes as well as supporting good populations of Slow-worms, Common Lizards and Common Frogs.*'

This report takes as its starting point the most recent site boundary / reasons for selection approved by the Local Site Partnership (LSP) in 2007. The LSP recognises that as a result these boundaries may differ from those formally incorporated into local plans by the relevant local authority.

In addition Stratford Bridge Wood was surveyed separately from Wisley Airfield in 2007 for the SNCI project, however it was not selected by the LSP at the time for the following reason '*It was decided that the site was not of sufficient value to select as SNCI. However it is noted that this site may have good potential if well managed.'* An extract from the relevant section of the 2006 SWT SNCI Report for Stratford Bridge Woodland (Gibbs, 2006), Nature Conservation Interest and Protected Species Potential however stated that '*Wet woodland is not a common habitat in Surrey and therefore this site is a valuable example of that habitat*.' It should also be noted that LSP were considering the ecological value of this site they were using the 1998 Selection Criteria, rather than the updated current 2008 SNCI Guidelines.

In November 2007, a report on the SNCI review process was published by Planning Policy Team at Guildford Borough Council as part of Local Development Framework. This document included a review of all the work that had been carried out over a four year period together with a description of all changes agreed by the Sites of Nature Conservation Liaison Group (SNCLG) (predecessor of LSP) and updated boundary maps for each site. A copy of this document can be downloaded from the Guildford Borough Council website.

Ownership

The site is owned by a private landowner.

Habitat description and target notes

Throughout the descriptions, plants are referred to by their common names. For reference the full species list in Table 2 at the end of the report lists both common and scientific names.

Broad-leaved Semi-natural Woodland

This habitat type is shown in green on Figure 1. There are several linear lines of broad-leaved woodland mainly on the boundary edges of the airfield and has for the most part, naturally colonised (for example west of Elm Corner and along Old Lane).

In some areas the woodland is part of an overspill of woodland immediately adjacent to the site such as the northern and western edges of Snakes Field and Hunts Copse, by Hatchford End. Species here include frequent Pedunculate Oak, Silver Birch with occasional Sweet Chestnut, Hazel, Elder, Holly, Goat Willow, Rusty Willow, Hawthorn and rare Rowan. The field layer is generally scant with locally frequent Bracken and rare Wood Sage and patches of Bramble.

Along the southern edge of Snakes Field there is a wide band of young planted woodland representing a similar composition to the nearby woodlands including Pedunculate Oak and Hawthorn woodland with Silver Birch, Rowan, Hawthorn, Hazel, Dogwood and thickets of Bramble. The Hatch Lane (path) that forms a separation between the two Snakes Field fields have mature planted trees either side forming a dense canopy and acting as woodland. Again Pedunculate Oak is present with Common Lime, Hornbeam, Beech, Hawthorn, Rowan and Dog Rose.

The woodland band west of Elm Corner is a well established woodland presenting a full canopy with a similar range of species to that described above, Pedunculate Oak being the most frequent with a varied field layer. Bracken is locally frequent with Bramble in the underscrub, with frequent Enchanter's Nightshade and occasional Cleavers, Ground-ivy and Male Fern. Rare are Common Nettle, Wood Avens, Broad-leaved Helleborine, Broad-leaved Willowherb, Common Figwort, Red Currant, Bluebell and Stinking Iris.

North of the western end of the runway is a mosaic of woodland, mature scrub, developing scrub with patches of Bracken. Those areas marked as ill-defined woodland comprising a scruffy mix of Pedunculate Oak and Hawthorn with Elder, Hazel, Blackthorn, Sycamore, Holly, Dog Rose and dense Bramble.

A wider band of wet woodland is present on the south western edge of the site called Stratford Bridge Wood. Along the northern edge next to the arable fields and southern edge the woodland is higher and the drier conditions provide an opportunity for species such as Sycamore, Pedunculate Oak, English Elm and Ash with Elder, overstood Hazel coppice, Hawthorn and Field Maple. Hazel coppice is locally abundant on the boundary bank.

This woodland has a meandering stream winding through the woodland floor. The damp conditions allow an Alder wood to prevail with maiden and multi-stemmed coppice Alder (some veteran) and an ancient stream bank. Accompanying the Alder are rare Horse-chestnut (with one mature example), Norway Maple, Holly, Field Maple, Grey Willow and Rusty Willow. The field layer is varied with typical woodland species such as frequent Bluebells and occasional Greater Stitchwort, Bracken, Hedge Woundwort, Pendulous Sedge, False Wood Brome, Remote Sedge, Red Campion, Bugle, Enchanter's Nightshade, Small Balsam, Giant Fescue, Wood Dock, Bearded Couch, Hairy Brome and Wood Spurge. Damp areas are denoted by the presence of Common Reed, Hemlock Water Dropwort, Common Marsh Bedstraw, Creeping Buttercup, Marsh Horsetail and Water Mint in flush lines and seepages. The invasive species Himalayan Balsam was noted here and Japanese Knotweed has been recorded in the western end of the woodland by previous surveys.

Dense Scrub

This habitat type is shown as cross hatched green lines on Figure 1 and is found scattered across the site. The following three areas are given as examples.

West of the western end of the runway is a complex mix of Gorse, Bramble, Hemlock and Bracken scrub mingled with tall ruderal vegetation and scattered scrub.

On the north edge of the eastern part of Snakes Field there is a woodland scrub edge of Rusty Willow, Blackthorn, Bracken and Bramble with tall vegetation such as Common Nettle.

Scrub edge north of the wet depression (see TN11 on Figure 1) with Pedunculate Oak, Blackthorn, Ash, Elder, Silver Birch and locally abundant Butterfly-bush.

Scattered Scrub

This is shown as green crosses on Figure 1. Scattered scrub is found across the edges of the site as a mix with other habitats.

There are patches of scattered scrub on Snakes Field such as Hawthorn, Dog Rose and Bramble bushes as well as young oaks. Scattered and developing scrub is also concentrated close to Mount Pleasant Cottages such as Bramble and towards the western end of the runway with scattered scrub such as Grey Willow, Bramble and Dog Rose.

Broad-leaved Scattered Trees

These are shown as green dots on Figure 1. There are several areas of scattered trees, mainly confined to the boundary edges.

Examples include a line of mature Pedunculate Oak near east of Hatch End, some more near Hyde Lane to the south of the site. There is one particularly mature decaying Pedunculate Oak approaching Stratford Bridge Wood, marked at Target Note 10.

There are several scattered trees in Snakes Field including a small stand of Silver Birch and young Pedunculate Oak.

Semi-improved Neutral Grassland
Shown in light orange and labelled SI on Figure 1.

There is one area of grassland towards the western end, north of the runway. This supports abundant Yorkshire-fog and Annual Meadow-grass, frequent Common Bird's-foot Trefoil, Creeping Thistle, occasional Field Forget-me-not, Creeping Buttercup, Common Ragwort, White Clover, Germander Speedwell, Springy Turf-moss, Self-heal, and rare Curled Dock, Common Mouse-ear, Changing Forget-me-not, Perforate St. John's-wort and Common Stork's-bill.

South of Elm Corner and by the Mount Pleasant Cottages is rough course grassland dominated by grasses including frequent Yorkshire-fog and False Oat-grass with Cock's-foot, Soft Brome, Rough Meadow-grass, Barren Brome, Red Fescue and Sweet Vernal-grass.

The grassland on the northern edge of Stratford Bridge Wood comprises a species rich 'meadow' of grassland and tall vegetation. Species include frequent to occasional False Oat-grass, Curled Dock, Common Knapweed, Creeping Buttercup, Germander Speedwell, Agrimony, Wild Teasel, Yorkshire-fog, Perforate St. John's-wort, Creeping Cinquefoil, Cleavers, Common Bird's-foot Trefoil, Wild Parsnip, Creeping Cinquefoil, Red Clover, Lesser Stitchwort, Hairy St. John's-wort, Cleavers, Creeping Thistle, Broad-leaved Dock, Field Forget-me-not, Red Bartsia, Ribwort Plantain, Tufted Vetch, Wild Basil and Dwarf Mallow. In a slight hollow was where over 70+ Southern Marsh Orchid (12 flowering spikes) were recorded.

Snakes Field
Snakes Field is divided into two (western and eastern) fields by a path and linear woodland. The eastern side is a little more varied and certainly the northern edge has a slight acidic feel from the underlying local soils. Here Sheep's Sorrel is locally abundant, in a wide band with frequent Germander Speedwell, Ribwort Plantain, Yarrow, Common Mouse-ear, Lesser Stitchwort and Rough Meadow-grass. More occasionally are Lesser Trefoil, Sweet Vernal-grass, Creeping Buttercup and Common Bird's-foot Trefoil. Whilst Field Forget-me-not, Yorkshire-fog and Common Ragwort (sprayed) are rare. Sheep's Sorrel is also locally abundant in the western field in a very small patch close to the Wilderness Cottage.

The rest of the field comprises frequent Yorkshire-fog with occasional Creeping Thistle, Creeping Buttercup, Rough Meadow-grass, Germander Speedwell, Ribwort Plantain, Common Sorrel, Greater Stitchwort and Field Forget-me-not. Lusher parts are marked out by taller lusher grasses and herbs in addition to the above locally frequent Common Knapweed, Field Wood-rush, Smooth Tare,

Common Bird's-foot Trefoil, Common Vetch and Red Bartsia. The western field in general is more dominated by more rough, coarse grassland.

In addition the following were recorded in the last few years by a local recorder - Wild Basil, Wild Marjoram, Yellow Rattle, Common Eyebright and Tormentil. Alsike Clover was recorded at the eastern end of Snakes Field, one plant only. Also local patches of Bird's-foot and Trailing St. John's-wort on the edge of wood by Elm Corner.

Semi-improved Neutral Grassland with Ephemeral /Short Perennial species

This represents parched ground on shallow soils towards the western end of the site. It is often grazed by rabbits and some are locally characteristic of acid grassland. Species are varied for example locally frequent Early Hair-grass, Little Mouse-ear, Field Forget-me-not, Biting Stonecrop, Common Stork's-bill, Common Mouse-ear, Sticky Mouse-ear, Parley-piert, Changing Forget-me-not, Early Forget-me-not, Procumbant Pearlwort, Scarlet Pimpernel, Squirrel-tailed Fescue, Thale-cress, Creeping Cinquefoil, Ribwort Plantain and tufts of Bugloss, Common Ragwort, Hard Rush, Spear Thistle, Perforate St. Johns-wort and Field Forget-me-not. Rue-leaved Saxifrage is rare, as is Silver Hair-grass.

There is a second small area of species-rich grassland with ephemeral/short perennial species which is located on the southern edge of the site near Hyde Lane. The weedy species include Common Ragwort, Field Forget-me-not, Biting Stonecrop, Bugloss, Germander Speedwell, Ground-ivy, Lesser Stitchwort, Yarrow, Common Stork's-bill, Red Bartsia, Thyme-leaved Sandwort, Scarlet Pimpernel, Spear Thistle, Vervain, Perforate St. John's-wort, Self-heal, Rough Hawkbit, Scentless Mayweed, Little Mouse-ear, Canadian Fleabane, Wild Teasel, Field Wild Pansy, Thyme-leaved Sandwort, Scarlet Pimpernel, Procumbent Pearlwort, White Clover, Common Mouse-ear, Annual Meadow-grass, Dwarf Mallow, Common Poppy, Weld, Buck's-horn Plantain, Early Hair-grass and Lesser Trefoil. It was here that over 20 plants of Common Cudweed, Sand Spurrey and the Hybrid Cinquefoil were recorded (*Potentilla x mixta* hybrid) at approximately TQ 06810 57315.

Continuous Bracken

Shown in terracotta on Figure 1. There are several small areas of dense Bracken over the site, mainly associated with woodland edge towards the northern boundaries and the west of the site.

There are dense areas of Bracken located on the edge of Snakes Field, part of the woodland ecotone. As well as other areas of Bracken particularly towards the western end of the runway, west of the wet depression (Target Note 11).

Tall Ruderal

Shown as terracotta diagonal lines on Figure 1. There is a patchy distribution of tall ruderal vegetation across the site and it is often an intimate mix with semi-improved neutral grassland and scattered scrub, therefore only the more obvious areas have been mapped. See also Target Note 5 for additional information.

They range from a collection of weedy tall species, to dense areas of Bramble, Common Nettle, Bracken (often associated with woodland edge) and/or Hemlock (locally dominant stands in the west of the site), intermingled with a range of other species such as Creeping Thistle, Spear Thistle, Field Forget-me-not and rare Bugloss and occasionally young trees such as Silver Birch.

For example weedy species often cropped up on the edge of the airstrip and arable fields being mapped as a linear line, including False Oat-grass, Creeping Thistle, Cow Parsley. Germander Speedwell, Scarlet Pimpernel, Dove's-foot Crane's-bill, Hawthorn saplings, Bramble, Field Forget-me-not, Broad-leaved Dock, Common Ragwort, Spear Thistle, Yorkshire-fog and Common Nettle.

The extensive stands of tall ruderal species east of Stratford Bridge include large patches dominated by Hemlock, Bramble and Common Nettle, occasionally with Blackthorn and Sycamore as well as False Oat-grass, White Dead-nettle, Common Ragwort, Creeping Buttercup, Creeping Thistle and Common Ragwort. As well as patches with an affinity towards a grassland mosaic such as Barren Brome, Common Bird's-foot Trefoil, Smaller Cat's-tail, Common Nettle, Common Ragwort, Creeping Thistle, Perennial Rye-grass, Rough Hawkbit, Ribwort Plantain, Dove's-foot Crane's-bill, Yarrow, Prickly Sow-thistle, Yorkshire-fog, Lesser Trefoil, Soft Brome and Nettle with Hemlock.

Standing Water
The temporary wet depressions and seasonal flushes are not mapped on Figure 1, but referred to by Target Note 11.

In addition parallel surveys by Consultants RPS and EPR noted other ponds on the site, and where relevant are discussed further.

Running Water
Shown as a blue line on Figure 1, it shows the length of the Stratford Brook running through the Stratford Bridge Wood.

Arable
Shown with a white background and labelled A on Figure 1. The majority of the site north, south and east of the airstrip is working arable fields.

The field edge vegetation is discussed under Tall Ruderal Vegetation. However several arable weeds were seen under the crops such as Field Pansy, Fat-hen, Pineappleweed, Common Ragwort, Prickly Sow-thistle, Redshank, Field Forget-me-not and Scarlet Pimpernel.

See also target notes for additional species information.

Intact Native Species-rich Hedge
Shown as a straight green line with green side dashes on Figure 1. There are two main hedges on the site.

There is one planted hedge/shaw by Mount Pleasant Cottages of Sycamore, Bramble and fruit trees.

In addition by Bridge End Farm there is a short section of hedge with English Elm, Pedunculate Oak, Hawthorn, Elder, Dog Rose, Common Ivy and Common Nettle.

Hard Standing (Concrete & tarmac with a mosaic of tall ruderal/ephemeral species)
This is shown in grey on Figure 1 and represents the old runway/airstrip.

This old disused airstrip has become weathered and cracked, this has over time provided suitable conditions for a wide range of ephemeral and short perennial species to exploit. Such as Common Whitlow-grass, Common and Sticky Mouse-ear, Weld, Thyme-leaved Sandwort, Perforate St. John's-wort, Field Forget-me-not, Biting Stonecrop, Dove's-foot Crane's-bill and Annual Meadow-grass.

For example south of Elm Lane the following show up in the cracks in the landing strip locally frequent Thyme-leaved Sandwort, Annual Meadow-grass, Yorkshire-fog, Perforate St. John's-wort, Field Forget-me-not, Early Forget-me-not, Changing Forget-me-not, Spear Thistle, Biting Stonecrop, Broad-leaved Willowherb, Procumbent Pearlwort, Lesser Trefoil, Scarlet Pimpernel, Common Stork's-bill, Bramble, Common Figwort, Wild Teasel, Squirrel-tail Fescue, Slender Parsley-piert and Dandelion. Taller ruderal species include Creeping Thistle, Spear Thistle, Bramble, Wild Teasel, Hard Rush, Bugloss and Evening Primrose sp., are the taller plants.

The hydrology of this area south of Elm Lane (known locally as Elm Corner) is such that water pools in places (see temporary pond description, TN11) and creates damp soil conditions under the cracked tarmac. The resulting vegetation reflects this with local patches of locally dominant Hard Rush, as well as Water Figwort and Common Figwort intermingled with Hard Rush and young developing scrub of Ash, Sycamore, Silver Birch, Grey Willow and Butterfly-bush.

By Hyde Lane, the track leading off the site to the south of the site, there is a varied tall ruderal vegetation including Common Nettle, Barren Brome, White Campion, Common Stork's-bill, Yarrow, Biting Stonecrop, Cut-leaved Crane's-bill, Groundsel, Cleavers, Red Fescue, Prickly Sow-thistle, Common Mallow, Common Field Speedwell, Red Dead-nettle, Field Forget-me-not, Bramble, Spear Thistle, Greater Plantain, Mugwort, Thyme-leaved Sandwort, White Dead-nettle, Ribwort Plantain, Common Bird's-foot Trefoil, Common Mouse-ear, Perforate St. John's-wort, Soft Brome, Nipplewort, Hemlock, Fat-hen, Field Bindweed, False Oat-grass, Prickly Lettuce, Scarlet Pimpernel, Groundsel, Common Evening-primrose and Field Pansy.

Building
There is one disused building in the south east corner of the site, Target Note 3. There is also a beacon in the same corner, Target Note 4.

Bare Ground
Shown as a white background with black dots on Figure 1 and represents the gravel at the western end of the runway, which is gradually scrubbing up.

Target Notes
Shown as a red circle and numbered from 1 to 12 on Figure 1.

Target Note 1 – Large rubble pile.
Target Note 2 – Great Brome (and found other places on arable field margins).
Target Note 3 – Disused airfield building.
Target Note 4 – Beacon.
Target Note 5 – Path with tall ruderals either side. Here the arable weed Sharp-leaved Fluellen, sometimes seen on sandy arable soils, along with Common Mallow, White Dead-nettle, Great Brome, Bugloss, Marsh Cudweed, Pineappleweed, Lesser Swine-cress, Ribwort Plantain, Creeping Thistle and Dove's-foot Crane's-bill.
Target Note 6 – Sand Spurrey, also recorded in the 'middle of the airfield' by local recorder.
Target Note 7 – Over 20 flowering Common Cudweed recorded in 2016.
Target Note 8 – Small number of Common Cudweed plants seen in 2016.
Target Note 9 – Corn Spurrey 20+ flowering plants recorded in 2016 on the southern edge of an arable field along with Wall Speedwell, Field Pansy, Thyme-leaved Sandwort, Fat-hen, Scarlet Pimpernel and Marsh Cudweed.
Target Note 10 – Mature decaying Pedunculate Oak.
Target Note 11 – Temporary pools. The southern one is vegetated with locally abundant New Zealand Pigmyweed, Field Forget-me-not, Hard Rush and surrounded by Grey Willow.
Target Note 12 – Knotted Hedge-parsley recorded in 2016 by local recorder.

Other non-plant species

A few casual notes on birds were made during the 2016 survey – Skylark, Buzzard, Green Woodpecker, Pheasant, Woodpigeon. On one visit a Field Vole was seen as well as a Common Toad. Rabbits dropping were also noted. A local recorder made a note of several butterflies during summer 2016 in particular Snakes Field such as Green Hairstreak, Common Blue and Small Copper.

Other additional survey summary information is included in this report from recent EPR and RPS surveys, commissioned by the site owners and supplied by Guildford Borough Council.

Assessment of Wisley Airfield 2007 reasons for SNCI selection using 2008 Guidelines for Surrey

The current reason for the Wisley Airfield SNCI selection from 2007 is given as – *'This site is selected for its importance for **reptiles, plants and birds**. 9 notable Surrey plant species have been recorded on the site. In addition 3 RSPB red list birds species and 7 RSPB amber list birds species have been recorded on the site. This site has an exceptional population of Grass Snakes as well as supporting good populations of Slow-worms, Common Lizards and Common Frogs.'*

Plants

Table 2 (at the back of this report) provides the species recorded in 2016. Table 3 provides a list of those plants that have been recorded on the site that have a conservation status, (also see notes attached to table). These are:

- **Grassland Indicators** – as listed in Table 1 in the Guidance for the Selection of Sites of Nature Conservation Importance (SNCIs) in Surrey (Gibbs, 2008).
- **Surrey Axiophytes** – as listed by Surrey Botanical Society, Surrey Axiophyte Plant Species (SBS, 2014), which are known to be 'worthy' plants and are plants indicative of habitats that need to be conserved.
- **Notable Species** - UK / England Red Data List species as well as species that are Rare, Scarce or of Conservation Interest in Surrey, as listed on the Draft Surrey County Rare Plant Register (SBS, Oct 2016).
- **Important Arable Plants** – As listed in Appendix 2 of the Important Arable Plant Areas by Plantlife (Byfield & Wilson, 2005).

A summary of the Plant Conservation Status for the site is provided below:

Table 1: Summary Plant Conservation Status

Status Type	Historical Total	Total for 2016
Grassland Indicators	56 (11 in bold)	40 (5 in bold)
Axiophytes	62	34
Notable Species:		
UK BAP Priority / SPI	2	-
GBRL: Endangered	3	-
GBRL: Vulnerable	1	1
GBRL: Near Threatened	2	1
ERL: Near Threatened	4	1
VC17 Rare	3	-
VC17 Scarce	4	1
Important Arable Plants (IAPA score)	47 points	33 points

Guildford Borough SNCI Surveys 2016: Existing Site

24 Vascular Plants a) Supports one or more species included in the latest National Red Data List for plants.

Comments – See Table 1 & Table 3 lists. 6 species on GB and England Red List have been recorded in the Wisley Airfield (excluding Snakes Field) since 2007, with 2 being recorded during 2016 surveys.

Wisley Airfield (not including Snakes Field)
*Loose Silky-bent – GBRL NT – last seen arable field edges 2014
*Hairy Rock-cress – ERL NT – last seen western end 2014
***Common Cudweed – GBRL NT – last seen southern central 2016**
***Corn Spurrey – GBRL V – last seen southern central 2016**
Annual Knawel – GBRL E – last seen 2007

* i.e.4 GBRL / ERL since 2014, thus meeting the criteria. Two of which were recorded during the 2016 survey. EPR (2017) Technical Note 2 states '*A small population of between 20-50 plants of Near Threatened (NT) Common Cudweed on one verge on the southern site of the site (a single plant was recorded close to this population by was later washed away and not refound). The other was a single plant in two locations of the Vulnerable (VU) arable weed Corn Spurrey recorded on the south edge of the site amongst rank grassland.'*

Snakes Field only
Common Eyebright – ERL NT – last seen 2010
Tormentil – ERL NT – last seen 2016
Heath Speedwell – ERL NT – last seen 2010

** i.e. 2 ERL NT since 2010, thus meeting the criteria.

- **Criteria met, for species found with a scattered distribution across Wisley Airfield and also Snakes Field.**

24 Vascular Plants d) Supports species identified by Surrey Botanical Society as rare and notable within Surrey.

Comments – 8 Rare and notable Surrey Species have been recorded at Wisley Airfield (excluding Snakes Field) since 2006, with 4 from the 2016 surveys.

Wisley Airfield (excluding Snakes Field)
*Loose Silky-bent – last seen arable field edges 2014
*Hairy Rock-cress – last seen western end 2014
***Cornflower – last seen arable fields 2016**
****Common Cudweed – last seen southern central 2016**
***Common Ramping-fumitory – last seen 2016**
Yellow Bartsia – last seen Elm Corner 2006
Annual Knawel – last seen 2007
****Corn Spurrey – last seen southern central 2016**

* 6 seen since 2014 across Wisley Airfield
** 2 seen in 2016 during 2016 SNCI survey

Snakes Field only
Common Eyebright – last seen 2010
Heath Speedwell – last seen 2010
Tormentil – last seen 2016

- **Criteria met, for species found scattered distribution across Wisley Airfield and also Snakes Field.**

Reptiles

20 Reptiles b. Populations of 3 or more native reptile species.

Comments – RPS (2013) Reptile Survey comments that the site supports 'Low' Populations of Adders and Common Lizard and 'Good' Populations of Slow-worms and Grass Snakes.

EPR (2015) Reptile Survey conclude that the site supports 'Low" Populations of Slow-worm, Common Lizard and Grass Snake.

EPR (2016) Reptile Survey comments that the site supports a 'Good' Populations of Slow-worm and Common Lizard and 'Low' Population of Grass Snake.

The site qualifies as a key reptile site under Froglife guidelines (Froglife, 1999).

- **Criteria met, reptile interest is confined to the western part of the site and the northern boundary.**

20 Reptiles d. Sites supporting an assemblage of species scoring at least 4 points using the scoring system in the SNCI Guidelines (Gibbs, 2008) can be considered for selection.

Comments – EPR (2017) Technical Note 2 state that '*Using the 2013 data those parts of the site where reptiles occur score six points, using the 2015 data the site scores four points and using the 2016 data the site scores five points*.'

- **Criteria met, reptile interest is confined to the western part of the site and the northern boundary.**

Birds

Comments – A separate, stand alone bird survey was not undertaken as part of this review as RPS survey information was already available via GBC. This

evaluation was therefore carried out using Wisley Airfield, Surrey: Breeding Bird Survey, Common Bird Census, Little Ringed Plover Survey**,** Nightjar Survey (RPS, 2014). 43 species were identified during these surveys. 32 considered to be breeding on the site. 6 UK BAP Priority Species / Species of Principal Importance (SPI) – Dunnock, House Sparrow, Linnet, Skylark, Song Thrush and Starling all of which were found to be breeding on the site.

For the purposes of this report the bird data has been updated using Birds of Conservation Concern 4 (BOCC4). On the BOCC4 Red List are Grey Wagtail, House Sparrow, Skylark and Starling. On the BOCC4 Amber List are Common Turn, Dunnock, Kestrel, Mallard, Stock Dove and Swift. No Nightjar or bird species associated with Thames Basin Heath Special Protection Area (SPA) (Nightjar, Woodlark and Dartford Warbler) were recorded.

The Wisley Airfield, Surrey: Wintering Bird Survey (RPS 2014) recorded 39 common bird species and concluded that there was an overall low diversity, although Fieldfare and Redwing (winter thrushes are specialists of arable habitats) were recorded on the site. Of these species 6 are UK BAP Priority Species / Species of Principal Importance (SPI) – Herring Gull, Dunnock, Song Thrush, Linnet, Skylark and Starling.

There are 8 listed on the BOCC4 Red list– Fieldfare, Herring Gull, Linnet, Mistle Thrush, Redwing, Skylark, Song Thrust, Starling. Also 4 on the BOCC4 Amber List – Black-headed Gull, Dunnock, Kestrel and Stock Dove.

- **Criteria not met, based on recent surveys supplied by GBC, the site does not currently meet the current SNCI guidelines for birds (Gibbs, 2008), see Appendix 2 for more information.**

Assessment of Wisley Airfield against SNCI selection using 2008 Guidelines for Surrey

The site meets the SNCI selection guidelines under the following criteria:

1 Woodland e. Wet woodland falling within NVC types W1, W2, W4c, W5, W6 and W7.

Comments – This relates to the 5.08ha wet Alderwood referred to in this report at Stratford Bridge Wood in the south west corner of the site. Although a full NVC was not undertaken, in the opinion of the surveyor, the woodland is likely to support W6 and W7 communities. This woodland habitat is considered to be a UK BAP Priority Habitat / Habitat of Principal Importance (HPI) and is within a Biodiversity Opportunity Area (BOA) RO4 – River Wey (and tributaries). In addition nine Ancient Woodland Indicators (AWI) were recorded here including grasses Giant Fescue, Bearded Couch, Wood Spurge and Hairy Brome (see species list table for overall site AWI list). In addition the 2007 SNCI survey saw

additional AWI species - Moschatel, Wood Meadow-grass, Field Rose and Wood Speedwell.

- **Criteria met for Stratford Bridge Wood.**

4 Neutral Grassland b. Grassland sites, which support a high diversity of species typical of grassland of conservation interest in Surrey. As a guideline, sites which support 15 or more of the species listed in Table 1 of the Guidance for the Selection of Sites of Nature Conservation Importance (SNCIs) in Surrey (Gibbs, 2008), including at least 2 of the species in bold are likely to be of SNCI quality.

Comments – As shown in Table 3 and Appendix 2 Criteria 24, Snakes Field meets the criteria to qualify as an SNCI in its own right. However it was surveyed here as part of a wider unit and as such contributes to the site as a whole.

In addition, in the opinion of the surveyor, the disturbed grassland towards the western end of the site is likely to contain populations of 15 or more Grassland Indicator Species. EPR (2017) Technical Note 2 suggests '*There are small areas of disturbed grassland. For example, one is an area used for the A3 works compound, one was used for historic landfill, some are associated with ground works for building the runway and taxiways. There is much imported material in these areas. These grasslands may have 15 or more indicator species in them*.'

Grassland Indicator Species recorded during the 2016 survey for Snakes Field total 17 with none in bold (see Gibbs, 2008), see Appendix 2 Criteria 4 Neutral Grassland for list of species also Table 3.

Those Grassland Indicator Species recorded during 2016 from Wisley Airfield as a whole (note species recorded from Snakes Field or Stratford Bridge Woodland are not included here) total 39 (with 6 bold) and although they have a scattered distribution over the site and over several different habitat types (i.e. not necessarily all on neutral grassland) there is a concentration at the western end of the site. See also Appendix 2 Criteria 4 Neutral Grassland for list of these species and Table 3.

- **Criteria met for Snakes Field.**
- **Criteria may be met with a restricted distribution in the western end of the runway.**

8 Standing Open Water c) Water bodies or clusters of water bodies which support a significant population of a species as discussed in the species guidance.

Comments – See Appendix 2 Criteria 19 c) where the value of Pond 3 is presented.

- **Criteria met for Pond 3.**

12 Open Mosaic Habitats on Previously Developed Land.

a) Open Mosaic habitat sites where;
- 6 or more of the characteristic features are found
- form part of a wider complex of similar areas, providing long term habitat opportunity
- There is a significant invertebrate assemblage

Comments – Sites where 6 or more of the characteristic features listed (in the SNCI Guidelines) would qualify as an SNCI for this criteria. The relevant features found on this site are Floristic & habitat diversity, Soil type and structure, Topography, Succession, Bare ground and Shelter. In the opinion of the surveyor there is very good potential for a significant invertebrate assemblage. The western end of the runway is of potential conservation interest for this habitat type. There are also other areas of with characteristic features scattered across the rest of the site, and whilst on their own are not significant, could be seen as important as part of a complex mosaic of habitats within the site as a whole.

In addition when using the criteria set out in the UK Biodiversity Action Plan Priority Habitat Descriptions: Open Mosaic Habitats on Previously Developed Land (July 2010) it is suggested that each of the criteria are met, listed below:

1 The area of open mosaic habitat is over 0.25ha in size.
2 There is a known history of disturbance of soil, spoil.
3 The site contains some early successional communities including annuals, ruderal and open grassland.
4 The site contains unvegetated, loose bare substrate and pools may be present.
5 The site shows spatial variation, forming a mosaic of communities.

Open mosaic habitats are considered UK BAP Priority Habitat / Habitat of Principal Importance (HPI). Although scattered across the site the main areas are towards the western end of the runway and on the southern boundary by Hyde Lane (track).

- **Criteria met for the western part of the site.**

13 Arable a, all sites which meet the criteria for Important Arable Plant Areas (IAPA), which are not covered by other designations.

Comments – The score for those plants seen in 2016 have been calculated to be 33 using the Important Arable Plant Areas document (Byfield & King, 2005), which indicates that the site is of County Importance for sandy and free draining

soils. The overall score for species found across the site since 1985 is 47, this places it in the category for qualifying for Plantlife Important Arable Areas for Site of UK Importance.

The arable weeds that have been recorded have a restricted, scattered distribution across the whole of the site.

Although questions have been asked as to the 'arable' nature of some of these records SWT ES feel that the fact that they are on site is an indicator of both current and potential value of this habitat. The ephemeral nature of arable plants makes evaluation of the distribution of these species in a single year difficult to assess. Whilst some of these species have not been seen in the last few years, with a little disturbance or correct climate conditions there could well be resurgence in populations. Although it is acknowledged that current management is unlikely to produce this. This is backed up by the Plantlife (2005) Important Arable Plant Areas '*For practical purposes records dating back to 1985 may be considered*.'

- **Criteria is met as the IAPA score would suggest that Wisley Airfield is of UK /County Importance. The majority of the records have restricted, scattered distribution from the arable fields, runway and western end of the site.**

18 Mammals Bats c. Foraging sites not associated directly with roosts should be considered for selection if more than 5 species are regularly recorded there or if used by any Annex II species.

Comments – RPS (2013) Bat Survey report states '*The site was assessed has having 'High' bat interest' and that 'The vegetated boundaries of the site (tree avenues, hedgerows, scrub corridors and woodland), were found to be the area of most value to bats on the site bring of 'High' bat interest. These three keys area provide a variety of habitats for bats to forage and commute. No bats were detected in the open arable fields during the three activity surveys which suggest these habitats offer limited foraging and commuting opportunities*.' During the 2013 surveys a total of five species were recorded - Common Pipistrelle, Soprano Pipistrelle, Myotis sp, Serotine and Noctule.

During the 2016 EPR Bat Survey four to five species were recorded on each survey, mostly from Common and Soprano Pipistrelle bats – Common Pipistrelle, Soprano Pipistrelle, Noctule, Myotis sp., Nathusius Pipistrelle & Leisler's bats.

- **This suggests that the criteria has been met. The main areas of interest for bats are the western end and along the southern edge.**

19 Amphibians c. Supports populations of four or more native amphibian species.

Comments – The updated EPR (2015) Amphibian survey states '*survey work has identified that areas potentially supporting up to four amphibian species within the site are limited to ponds 2 and 3 and suitable connected terrestrial habitat (i.e. the northern, western and south western part of the site only*).'

The data from the EPR (2013 & 2015) surveys identified Smooth Newt, Common Toad and Common Frog on the site. In addition Great Crested Newt have also been found on the site, although not found to be breeding in the ponds, and by unrelated surveys on Surrey Wildlife Trust land to the north and it could be suggested that '*this may represent a potential metapopulation*.' (D Winchester, SWT ES/SARG pers. comm.). Therefore this criteria is met for Pond 3.

- **Criteria met for Pond 3 on the south western corner of the site.**

The site *may* also meet the SNCI selection guidelines under the following criteria;

22 Invertebrates.

Comments – EPR state that '*an updated invertebrate survey was carried on from May – September 2013'*, and in that report the author states that '*a full invertebrate survey was undertaken'*. 44 invertebrates were recorded over 6 visits. The updated EPR Invertebrate Survey 2016 found 73 species, recorded on a single site visit during July.

It is of the opinion of two local entomologists who know Wisley Airfield that the site has potential to be of conservation interest for invertebrates.

- **Further invertebrate survey work is recommended over several days during a full season by an experienced entomologist to fully ascertain the conservation status for Wisley Airfield for invertebrates.**

General guidelines

The SNCI selection guidelines (Gibbs, 2008) state that "*sites that are close to, but do not quite meet the detailed habitat and species guidelines … may be considered for selection where they are judged as important using the general guidelines*" which are based on the Ratcliffe Criteria (Ratcliffe, 1977).

Comments – See Appendices 1 and 2. Appendix 3 shows an assessment of the site against the general guidelines.

Site condition

Unfavourable Declining – The site combines a patchwork of habitats and arable fields that have provided a unique assemblage of rare and unusual species. However, apart from the arable fields and Snakes Field (Surrey Wildlife Trust reserve and under different ownership) it is not currently being managed.

Boundaries

In general terms, the boundaries of the site as defined in 2006 are still considered to be an accurate reflection of the qualifying nature conservation interest as described by this report. However two boundary changes are recommended (see Figure 3).

As Guidance for the Selection of SNCIs in Surrey (Gibbs, 2008) make clear, page 7 first bullet point '*Wherever possible the boundaries of an SNCI should follow clear physical boundaries on the ground for example a field or woodland edge. It is essential to define boundaries that can be located both on the ground and on maps to avoid confusion about the exact location and to assist later surveys*.' '*Care should be taken not to include significant areas of land which do not meet the selection guidelines*. ***However it may be necessary for the future viability of the site to include some habitat that is of lesser value*** (authors emphasis).'

As shown above, Wisley Airfield SNCI (as surveyed in 2016) comprises three separate but connected units, Snakes Field, Stratford Bridge Wood and Wisley Airfield, which taken together combine into a single SNCI unit.

Stratford Bridge Wood was surveyed in addition to that of the existing SNCI boundary as it was within the same ownership and access was provided along with the rest of the Airfield. This area is then proposed for inclusion to the existing SNCI, as shown on our Figure 3, for its SNCI features (i.e. wet woodland). Only this part of the wood was surveyed as permission was not sought at this time for the contiguous woodland downstream to the east of this stretch towards Bridge End, nor for the stream north of the A3 parallel to Mill Lane. SWT ES will propose to the Local Sites Partnership that we seek Guildford Borough Councils permission to find the landowners for this section of woodland and that they are approached to see if they would be willing to have their woodland surveyed at the optimum time and report back to LSP as to its suitability for an SNCI extension. The changes suggested are to reflect the additional wet Alder woodland and as such is a UK BAP Priority Habitat / Habitat of Principal Importance (HPI).

Boundaries of some features were not originally shown on the GIS base map however, this has changed, as such the following changes on underlying ordinance survey base map are recommended. The garden areas around Mount Pleasant Cottages and Wilderness Cottage are removed, as they are deemed not to be of sufficient quality to be included in the SNCI and can be easily removed due to the ownership boundaries and boundaries on the GIS map layer.

Signs of damage

There is some evidence of spoil and during the course of the survey large piles of tyres were put across the runway.

Current site management

The majority of the site is managed as arable fields. The rest of the site is left unmanaged, except for Snakes Field, which is managed by Surrey Wildlife Trust.

Management advice

Woodland

In order to maximise the biodiversity of woodland, it is important to create a diverse structure. This will include a canopy of mature trees, a shrub layer and a proportion of open space. Trees should be of a range of ages and species.

The presence of decaying wood within woodland is very important for a range of species, particularly fungi, invertebrates and mammals such as bats. A mixture of standing and fallen deadwood is important as they provide different conditions and support different species. Only fell dead trees where necessary for health and safety reasons and if possible only remove the dangerous branches rather than the whole tree.

When carrying out work in woodlands it is best to avoid the bird nesting season (March-August) and to avoid carrying out work when the ground is particularly soft to avoid damaging the soil. Wherever possible avoid planting as natural regeneration of woodland is most beneficial to the local ecology.

Wet Woodland

Wet woodland is often found by streams and other water bodies and is normally dominated by Ash, Alder and Willow species. It often supports an interesting but fragile ground flora and invertebrate assemblage.

This type of woodland is often best left undisturbed as management work can easily damage their fragile soils. Natural processes will lead to trees reaching maturity and dying naturally thus creating gaps in the canopy. However, if coppicing has been a feature of the historical management of the woodland, this should be continued provided that it doesn't damage the ground to much.

Scrub

Scrub is often a component of other habitats and is often viewed as a negative element that needs to be controlled. However it supports a wide range of species and the transitional zone between scrub and other habitats is particularly important for many species including invertebrates, breeding birds and reptiles.

When managing scrub, it is important to maintain structural diversity and a range of age classes. Rotational cutting can help achieve this. Cutting the scrub back in some places can create a mosaic of scrub and grassland. Grazing also has a similar effect as long as the grazing pressure is not too high.

Neutral Grassland

Neutral grassland requires active management in order to retain its conservation interest. Without management, tall vigorous grasses will dominate and dead plant matter will accumulate. This will suppress the less vigorous species and the botanical diversity of the grassland will decrease. The key to managing grasslands is to remove each year's growth of vegetation. This can be achieved by grazing (as in traditional pastureland), cutting or a combination of the two (as in traditional hay meadows).

When grazing, aim to keep a relatively open sward without excessive poaching. The timing of grazing of pastures will depend on local conditions and the needs of particular species on the site. Light trampling is good as it provides bare areas for seed germination.

Hay meadows are cut traditionally in early July after ground nesting birds have fledged and most plants have set seed. This may need to be adjusted if there are some important plants that set seed later. Following the cut, the arisings should be removed. If possible the grassland should then be aftermath grazed until late autumn.

Some trees and scrub are an important component of grassland habitats. They should however be confined to small scattered groups.

Arable

The following information is taken from the Arable Plants of Langley Vale (King, 2014).

Arable plants are annuals, and therefore require regular disturbance to create the bare ground they need for their seeds to germinate. Historically this disturbance has been provided by the annual cycles of cultivation associated with arable crop husbandry. Depending on the species, some arable plant will set seed relatively early in the year (Summer) while others will set seed later, in the Autumn. Depending on the prevailing weather conditions, the seeds of some species will germinate in the Autumn and over-winter as seedlings, while others will germinate in the Spring.

There should be no application of Nitrogen fertiliser or any herbicide use; and there should be a cultivated unsown margin left along the edge of the crop, as well as an uncultivated margin by the hedge.

It is not necessary to plant a crop, to provide the conditions for arable plants to grow. If a crop is going to be planted, it is essential that it is a "traditional" variety, and that it is not planted too densely. It should be planted in the Spring, and no

fertiliser or herbicide should be applied. When a crop has been harvested, stubbles should be left over winter.

Given the right conditions, arable plants will occur throughout the area of arable fields, but where they survive they tend to be concentrated along field edges, as is the case at Wisley Airfield.

Where a field margin is maintained for its arable plants, it should be large enough to enable management by modern farm machinery. It should also be relatively unshaded, and form part of a sequence of habitats. The exact width of these strips can vary, but the uncultivated strip should be at least 10m wide to enable arable plant assemblages to develop and for particularly threatened species to increase their populations.

Invasive species

Japanese Knotweed
This is a very invasive species which will spread rapidly if not controlled. The species is listed on Schedule 9 the Wildlife and Countryside Act 1981 which means that it is an offence to plant or cause the species to spread in the wild. Care should be taken if moving the species off site for disposal. The Environment Agency (EA) have produced 'The Knotweed Code of Practice' (EA, 2013). Although this is aimed at developers it contains a lot of useful information on controlling this species. This and other information can be found on their website.

Himalayan Balsam
This species should be controlled as it is very invasive and will reduce species diversity. It is important that it does not spread further particularly into the ditches on the site. This species will require on-going control by pulling or cutting annually before it sets seed. The species is listed on Schedule 9 the Wildlife and Countryside Act 1981 which means that it is an offence to plant or cause the species to spread in the wild. Care should be taken if moving the species off site for disposal.

Potential grant aid

Natural England's Magic Interactive Mapping website (http://magic.defra.gov.uk/) suggests that the site is not currently covered by an Environmental Stewardship, Woodland Grant Scheme or Countryside Stewardship grant.

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Higher plant list

- Abundance uses the DAFOR system; (**L**ocally) **D**ominant, **A**bundant, **F**requent, **O**ccasional, **R**are
- Plants ranked 'rare' mean that they were not found often over this site and does not necessarily indicate that they are a National or County Rarity
- Relevant supplementary species information has been included in Table 3 for the SNCI review process as historical context. It has been made clear when the last record was made. It is known, especially in the case of arable weeds, that seed can sometimes remain dormant, for several years only to come back from the seed bank when conditions change.
- When this report was being written, additional records were supplied by a local recorder (Surrey Botanical Society (SBS) member), who visited the site independently using Public Rights of Way. A majority of the species were for Snakes Field.

[1] Species typical of grassland of conservation interest in Surrey (as listed in Guidance for the Selection of SNCIs in Surrey, May 2008). The number of bold species within this list should also be noted separately.
[2] Surrey Axiophyte Plant Species (as listed on the Draft Surrey Axiopyhte List 2014), which are known to be 'worthy' plants and are plants indicative of habitats that need to be conserved. Axiophytes do not currently form part of the SNCI guidelines, however they are included here as they provide an indication of the wider value of the site.

[3] Species that are Rare, Scarce or of Conservation Interest in Surrey (as listed on the Draft Surrey County Rare Plant Register Oct 2016), also those on the GB / England Red Data List of Plants.
[4] Ancient Woodland Indicator species (as listed for the Nature Conservancy Council South-East Region, see Rose 2006)
[5] Invasive species;

- Schedule 9: Species as listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended).
- Plantlife, 2010: Species identified as Critical, Urgent or Moderate risk within Here Today, Gone Tomorrow? Horizon
- Scanning for Invasive Non-native Plants (Plantlife, 2010).
- SWT, 2012: Species listed within Surrey Non-native Invasive Species List (SWT, 2012).

[6] Important Arable Plant Areas based on criteria in Appendix 2 of Plantlife's Important Arable Plant Areas project (Byfield & Wilson, 2005).

Table 2: Plant Species Recorded in 2016

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Acer campestre	Field Maple	R		✓		✓	
Acer platanoides	Norway Maple	R					
Acer pseudoplatanus	Sycamore	R					✓
Achillea millefolium	Yarrow	R					
Aesculus hippocastanum	Horse-chestnut	R					
Agrimonia eupatoria	Agrimony	R					
Agrostis capillaris	Common Bent	R					
Agrostis stolonifera	Creeping Bent	R					
Aira caryophyllea	**Silver Hair-grass**	R	✓	✓	VC17 Scarce		
Aira praecox	Early Hair-grass	R	✓	✓			
Ajuga reptans	Bugle	R					
Alnus glutinosa	Alder	LA					
Anagallis arvensis	Scarlet Pimpernel	R					
Anchusa arvensis	Bugloss	R	✓	✓			
Anisantha diandra	Great Brome	R					
Anisantha sterilis	Barren Brome	R					
Anthoxanthum odoratum	Sweet Vernal Grass	R	✓				
Anthriscus sylvestris	Cow Parsley	R					
Aphanes arvensis	Parsley-piert	R					
Aphanes inexspectata	Slender Parsley-piert	R	✓	✓			
Arabidopsis thaliana	Thale Cress	R					
Arctium lappa	Greater Burdock	R					
Arctium minus	Lesser Burdock	R					
Arenaria serpyllifolia	Thyme-leaved Sandwort	R	✓	✓			

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Arenaria serpyllifolia ssp. serpyllifolia	a thyme-leaved sandwort	R	As above, counted as one				
Arrhenatherum elatius	False Oat-grass	R					
Artemisia vulgaris	Mugwort	R					
Arum maculatum	Lords-and-ladies	R					
Barbarea vulgaris	Winter-cress	R					
Bellis perennis	Daisy	R					
Betula pendula	Silver Birch	R					
Brachypodium sylvaticum	False-brome	R					
Bromopsis ramosa	Hairy Brome	R		✓		✓	
Bromus hordeaceus	Soft-brome	R					
Bryonia dioica	White Bryony	R					
Buddleja davidii	Butterfly-bush	LF					
Capsella bursa-pastoris	Shepherd's-purse	R					
Cardamine hirsuta	Hairy Bitter-cress	R					
Carduus crispus	Welted Thistle	R					
Carex divulsa ssp. divulsa	Grey Sedge	R					
Carex hirta	Hairy Sedge	R					
Carex muricata ssp. pairae	Prickly Sedge	R		✓			
Carex pendula	Pendulous Sedge	R		✓		✓	
Carex remota	Remote Sedge	R		✓		✓	
Carpinus betulus	Hornbeam	R		✓		✓	
Castanea sativa	Sweet Chestnut	R					
Centaurea nigra	Common Knapweed	R					
Centaurium erythraea	Common Centaury	R	✓				
Cerastium fontanum	Common Mouse-ear	R					
Cerastium glomeratum	Sticky Mouse-ear	R					
Cerastium semidecandrum	**Little Mouse-ear**	R	✓	✓			

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Chaerophyllum temulum	Rough Chervil	R		✓			
Chamerion angustifolium	Rosebay Willowherb	R					
Chenopodium album	Fat-hen	R					
Circaea lutetiana	Enchanter's-nightshade	R					
Cirsium arvense	Creeping Thistle	R					
Cirsium vulgare	Spear Thistle	R					
Clinopodium vulgare	Wild Basil	R	✓	✓			
Conium maculatum	Hemlock	LA					
Convolvulus arvensis	Field Bindweed	R					
Conyza canadensis	Canadian Fleabane	R					
Conyza floribunda	Bilbao's Fleabane	R					
Cornus sanguinea	Dogwood	R					
Coronopus didymus	Lesser Swine-cress	R					
Corylus avellana	Hazel	R					
Crassula helmsii	New Zealand Pigmyweed	R					Schedule 9
Crataegus monogyna	Hawthorn	R					
Crepis capillaris	Smooth Hawk's-beard	R					
Dactylorhiza praetermissa	**Southern Marsh-orchid**	R	✓	✓			
Datura stramonium	Thorn-apple	R					
Dipsacus fullonum	Wild Teasel	R					
Dryopteris filix-mas	Common Male Fern	R					
Eleocharis palustris	Common Spike-rush	R					
Elymus caninus	Bearded Couch	R		✓		✓	
Epilobium ciliatum	American Willowherb	R					
Epilobium hirsutum	Great Willowherb	R					
Epilobium montanum	Broad-leaved Willowherb	R					
Epilobium tetragonum	Square-stalked Willowherb	R	✓				
Epipactis helleborine	Broad-leaved Helleborine	R		✓		✓	
Equisetum arvense	Field Horsetail	R					

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Equisetum palustre	Marsh Horsetail	R	✓	✓			
Erodium cicutarium	Common Stork's-bill	R	✓				
Erophila verna	Common Whitlow-grass	R	✓				
Erophila verna ssp. verna	a common whitlowgrass	R	As above, counted as one.				
Euphorbia amygdaloides	Wood Spurge	R		✓		✓	
Fagus sylvatica	Beech	R					
Fallopia convolvulus	Black Bindweed	R					
Festuca rubra	Red Fescue	R					
Filago vulgaris	Common Cudweed	R		✓	GBRL: Near Threatened		
Fraxinus excelsior	Ash	R					
Fumaria officinalis	Common Fumitory	R					
Galeopsis tetrahit	Common Hemp-nettle	R					
Galium aparine	Cleavers	R					
Galium palustre	Common Marsh-bedstraw	R	✓				
Geranium dissectum	Cut-leaved Crane's-bill	R					
Geranium molle	Dove's-foot Crane's-bill	R					
Geranium pusillum	Small-flowered Crane's-bill	R					
Geranium robertianum	Herb-Robert	R					
Geum urbanum	Herb Bennet	R					
Glechoma hederacea	Ground-ivy	R					
Gnaphalium uliginosum	Marsh Cudweed	R					
Hedera helix ssp. helix	Common Ivy	R					
Heracleum sphondylium	Hogweed	R					
Holcus lanatus	Yorkshire-fog	R					
Hordeum murinum	Wall Barley	R					
Humulus lupulus	Hop	R					
Hyacinthoides non-scripta	Bluebell	R		✓		✓	

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Hypericum hirsutum	Hairy St. John's-wort	R					
Hypericum humifusum	Trailing St. John's-wort	R	✓	✓			
Hypericum perforatum	Perforate St. John's-wort	R					
Hypericum tetrapterum	Square-stalked St. John's-wort	R	✓	✓			
Hypochaeris radicata	Cat's-ear	R					
Ilex aquifolium	Holly	R		✓		✓	
Impatiens glandulifera	Himalayan Balsam	LF					Schedule 9
Impatiens parviflora	Small Balsam	R					
Iris foetidissima	Stinking Iris	R		✓		✓	
Juncus acutiflorus	Sharp-flowered Rush	R	✓	✓			
Juncus articulatus	Jointed Rush	R	✓	✓			
Juncus bufonius	Toad Rush	R					
Juncus conglomeratus	Compact Rush	R					
Juncus effusus	Soft Rush	R					
Juncus inflexus	Hard Rush	R					
Juncus tenuis	Slender Rush	R					
Kickxia elatine	Sharp-leaved Fluellen	R					
Lactuca serriola	Prickly Lettuce	R					
Lactuca virosa	Greater Lettuce	R					
Lamium album	White Dead-nettle	R					
Lamium purpureum	Red Dead-nettle	R					
Lapsana communis	Nipplewort	R					
Leontodon hispidus	Rough Hawkbit	R	✓				
Leontodon saxatilis	Lesser Hawkbit	R	✓	✓			
Leucanthemum vulgare	Oxeye Daisy	R	✓				
Ligustrum ovalifolium	Garden Privet	R					
Lolium perenne	Perennial Rye-grass	R					
Lotus corniculatus	Common Bird's-foot-trefoil	R	✓				
Luzula campestris	Field Wood-rush	R					

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Lycopus europaeus	Gipsywort	R					
Malva moschata	Musk-mallow	R					
Malva neglecta	Dwarf Mallow	R					
Malva sylvestris	Common Mallow	R					
Matricaria recutita	Scented Mayweed	R					
Medicago arabica	Spotted Medick	R					
Medicago lupulina	Black Medick	R					
Mentha aquatica	Water Mint	R					
Montia fontana ssp. chondrosperma	**Blinks**	R	✓	✓			
Myosotis arvensis	Field Forget-me-not	R					
Myosotis discolor	Changing Forget-me-not	R	✓	✓			
Myosotis ramosissima	Early Forget-me-not	R	✓	✓			
Odontites vernus	Red Bartsia	R	✓				
Oenanthe crocata	Hemlock Water-dropwort	R					
Oenothera biennis	Common Evening-primrose	R					
Oenothera glazioviana	Large-flowered Evening-primrose	R					
Oenothera sp.	an evening primrose	R					
Ornithopus perpusillus	Bird's-foot	R	✓	✓			
Papaver rhoeas	Common Poppy	R					
Pastinaca sativa	Wild Parsnip	R					
Pentaglottis sempervirens	Green Alkanet	R					
Persicaria hydropiper	Water-pepper	R					
Persicaria maculosa	Redshank	R					
Phalaris arundinacea	Reed Canary-grass	R					
Phleum bertolonii	Smaller Cat's-tail	R	✓				
Picris echioides	Bristly Oxtongue	R					
Pinus sylvestris	Scots Pine	R					

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Plantago coronopus	Buck's-horn Plantain	R	✓	✓			
Plantago lanceolata	Ribwort Plantain	R					
Plantago major	Greater Plantain	R					
Poa annua	Annual Meadow-grass	R					
Poa trivialis	Rough Meadow-grass	R					
Polygonum arenastrum	Equal-leaved Knotgrass	R					
Polygonum aviculare	Knotgrass	R					
Populus tremula	Aspen	R		✓		✓	
Potentilla erecta	Tormentil	R	✓	✓	ERL: Near Threatened		
Potentilla reptans	Creeping Cinquefoil	R					
Potentilla x mixta	Hybrid Cinquefoil	R					
Prunella vulgaris	Selfheal	R					
Prunus spinosa	Blackthorn	R					
Pteridium aquilinum	Bracken	LF					
Pulicaria dysenterica	Common Fleabane	R					
Quercus robur	Pedunculate Oak	R					
Ranunculus repens	Creeping Buttercup	R					
Reseda luteola	Weld	R					
Ribes rubrum	Red Currant	R		✓		✓	
Rosa canina agg.	Dog Rose	R					
Rosa sp.	a rose	R					
Rubus fruticosus agg.	Bramble	LA					
Rumex acetosa	Common Sorrel	R	✓	✓			
Rumex acetosella	Sheep's Sorrel	R	✓				
Rumex conglomeratus	Clustered Dock	R					
Rumex crispus	Curled Dock	R					
Rumex obtusifolius	Broad-leaved Dock	R					
Rumex sanguineus var. viridis	a wood dock	R					

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Sagina apetala (c.f. erecta) = Sagina filicaulis	Annual Pearlwort	R					
Sagina procumbens	Procumbent Pearlwort	R					
Salix caprea	Goat Willow	R					
Salix cinerea ssp. oleifolia	a willow	R					
Sambucus nigra	Elder	R					
Saxifraga tridactylites	Rue-leaved Saxifrage	R		✓			
Schedonorous giganteus	Giant Fescue	R		✓		✓	
Scrophularia auriculata	Water Figwort	R					
Scrophularia nodosa	Common Figwort	R					
Sedum acre	Biting Stonecrop	LA	✓	✓			
Senecio erucifolius	Hoary Ragwort	R					
Senecio jacobaea	Common Ragwort	R					
Senecio vulgaris	Groundsel	R					
Silene dioica	Red Campion	R					
Silene latifolia	White Campion	R					
Sisymbrium officinale	Hedge Mustard	R					
Solanum dulcamara	Bittersweet	R					
Solanum nigrum	Black Nightshade	R					
Sonchus asper	Prickly Sow-thistle	R					
Sonchus oleraceus	Smooth Sow-thistle	R					
Sorbus aucuparia	Rowan	R					
Spergula arvensis	Corn Spurrey	R		✓	GBRL: Vulnerable		
Spergularia rubra	Sand Spurrey	R	✓	✓			
Stachys sylvatica	Hedge Woundwort	R					
Stellaria graminea	Lesser Stitchwort	R	✓				
Stellaria holostea	Greater Stitchwort	R					
Stellaria media agg.	Chickweed	R					

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Symphytum officinale	Common Comfrey	R					
Taraxacum sp.	Dandelion agg.	R					
Teucrium scorodonia	Wood Sage	R					
Tilia cordata x platyphyllos	Common Lime	R					
Torilis japonica	Upright Hedge-parsley	R					
Torilis nodosa	**Knotted Hedge-parsley**	R	✓	✓			
Tragopogon pratensis ssp. minor	Goat's-beard	R	✓				
Trifolium arvense	Hare's-foot Clover	R	✓	✓			
Trifolium dubium	Lesser Trefoil	R					
Trifolium pratense	Red Clover	R					
Trifolium repens	White Clover	R					
Tripleurospermum inodorum	Scentless Mayweed	R					
Typha latifolia	Bulrush	R					
Ulex europaeus	Gorse	R					
Ulmus procera	English Elm	R					
Urtica dioica	Common Nettle	R					
Urtica urens	Small Nettle	R					
Valerianella locusta	Common Cornsalad	R					
Verbascum thapsus	Great Mullein	R					
Verbena officinalis	Vervain	R	✓				
Veronica arvensis	Wall Speedwell	R					
Veronica chamaedrys	Germander Speedwell	R					
Veronica hederifolia	Ivy-leaved Speedwell	R					
Veronica persica	Common Field-speedwell	R					
Veronica serpyllifolia	Thyme-leaved Speedwell	R					
Vicia cracca	Tufted Vetch	R					
Vicia sativa ssp. nigra	Narrow-leaved Vetch	R					
Vicia tetrasperma	Smooth Tare	R					
Viola arvensis	Field Pansy	R					

Scientific Name	Common Name	DAFOR*	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	Ancient Woodland Indicators[4]	Invasive species[5]
Vulpia bromoides	Squirrel-tail Fescue	R		✓			
Vulpia myuros	Rat's-tail Fescue	R					
Total		249	Total:40 No. of bold:5	Axiophytes; 45	GBRL Vulnerable: 1 GBRL Near Threatened: 1 ERL Near Threatened: 1 VC17 Scarce: 1	14	Schedule 9: 2

Table 3: All Recorded Plants with Conservation Status

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
Adoxa moschatellina	Moschatel		✓				
Aethusa cynaphium ssp.agrestis	Fool's Parsley		✓			19.7.2006	
Aira caryophyllea	**Silver Hair-grass**	✓	✓	VC17 Scarce		Summer 2016	EPR: Not seen on the 2015 survey. Only small areas of habitat with potential for this species at the western end of the runway. SWT: Recorded in the 2016 survey, western end of the runway.
Aira praecox	Early Hair-grass	✓	✓			Summer 2016	SWT: Found in western end of airstrip in short grassland in 2016. New Record.
Alopecurus geniculatus	Marsh Foxtail	✓	✓			18.6.2005	

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
Anchusa arvensis	Bugloss	✓	✓		1	Summer 2016	SWT: Found on 2016 across the site on field/airstrip edges
Anthoxanthum aodoratum	Sweet Vernal-grass	✓				Summer 2016	SWT: New Record.
Apera spica-venti	Loose Silky-bent		✓	GBRL Near Threatened / VC17 Scarce	6	11.7.2014	EPR: Not seen in 2015 but almost certainly still present. SWT: Agreed, not seen in 2016.
Aphanes australis	Slender Parsley-piert	✓	✓		1	Summer 2016	SWT: Recorded in 2016 in western end of airstrip.
Arabis hirsuta	**Hairy Rock-cress**	✓	✓	ERL: Near Threatened / VC17 Scarce		18.5.2014	SWT: Not seen during the 2016 survey, but given that it has been seen in the last couple of years there is potential for it to reappear, particularly in the western end of the runway.
Arenaria leptoclados	Slender Sandwort		✓			19.7.2006	
Arenaria leptocladas	Thyme-leaved Sandwort	✓	✓			Summer 2016	SWT: Found in 2016 very locally scattered across the site on airstrip.
Carduus nutans	Musk Thistle		✓			11.7.2014	EPR: Seen in 2016 but not recorded as on Bridge End Farm field margin just outside boundary
Carex muricata ssp. lamprocarpa	Prickly Sedge		✓			Summer 2016	SWT: Found in 2016 in the grassland on edge of Stratford Bridge Wood.
Carex panuculata	Greater Tussock-sedge	✓	✓			18.10.1965	SWT: Habitat in wet Alder wood is suitable, so may yet appear again.
Centaurea cyanus	Cornflower		✓	UK BAP Priority Species & Species	8	14.7.2014 & seen	EPR: Not found on the EPR 2015 survey. SWT: Not seen during 2016 survey, but

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
				of Principal Importance (SPI) / VC17 Rare		Summer 2016 by local recorder	seen this year by local recorder and in good numbers last year (pers. comm.).
Centaurium erythraea	Common Centaury	✓				Summer 2016	SWT: Seen scattered across the site, although overall rare.
Centaurium pulchellum	Lesser Centaury		✓			11.7.2014	
Cerastium semidecandrum	**Little Mouse-ear**	✓	✓			Summer 2016	SWT: Recorded in the short sward, western end of runway.
Chaerophyllum temulum	Rough Chervil		✓			28.8.2015	
Clinopodium vulfare	Wild Basil	✓	✓			Summer 2016	
Dactylorhiza praetermissa	**Southern Marsh-orchid**	✓	✓			Summer 2016	SWT: Population recorded in grassland on edge of Stratford Bridge Wood.
Epilobium tetragonum	Square-stalked Willowherb	✓				Summer 2016	
Equisetum palustre	Marsh Horsetail	✓	✓			Summer 2016	SWT: Found in Stratford Bridge Wood.
Erigeron acris	Blue Fleabane	✓	✓				
Erodium cicutarium	Common Stork's-bill	✓			1	Summer 2016	SWT: Scattered across the runway and short swards.
Euphrasia nemorsa	Common Eyebright	✓	✓	ERL: Near Threatened		4.10.15	SWT: Snakes Field seen by local recorder.
Filago lutescens	**Red-tipped Cudweed**	✓	✓	GBRL: Endangered	8 Not recorded since 1968 – score not		EPR: Last record for this species was 1968. It was searched for in 2015 but no cudweeds were seen. Almost certainly extinct though there is a slight possibility

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
					included		of survival in the seed bank though published work indicated that it probably has a short seed life. SWT: Agreed, not seen in 2016.
Filago vulgaris	Common Cudweed		✓	GBRL: Near Threatened	6	Summer 2016	EPR: The 2015 fieldwork searched for this species but none was found. Suitable habitat is present on site west of the runway. SWT: Recorded in 2016 survey in two patches south of centre. Also seen by local recorder in another location towards the western end of runway.
Fumaria muralis ssp. bBordei	Common Ramping Fumitory		✓	VC17 Scarce		Summer 2016	SWT: Not seen during survey, but recorded by local recorder.
Galium palustre	Common Marsh-bedstraw	✓				Summer 2016	
Geranium pusillum	Small-flowered Crane's-bill				2		
Gnaphalium sylvaticum	**Heath Cudweed**	✓	✓	GBRL: Endangered			EPR: The SBS record for this species is a square that is largely in the Elm Corner Woods SNCI, with only a small part in the Wisley Airfield site itself and then on the hard standing. No Heath Cudweed was seen on the 2015 survey. There is no suitable habitat in the SBS recorded square for this species 2015 survey work recorded this species on several historic boundaries within the airfield site.

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
							SWT: As above, not seen in 2016.
Hypericum humifusum	Trailing St. John's-wort	✓	✓			Summer 2016	SWT: Seen on the arable field edges.
Hypericum tetrapterum	Square-stalked St. John's-wort	✓	✓			Summer 2016	
Juncus acutiflorus	Sharp-flowered Rush	✓	✓			Summer 2016	SWT: Found in wet flushes and depressions in tarmac block west of Elm Corner.
Juncus articulatus	Jointed Rush	✓	✓			Summer 2016	SWT: Found in wet flushes and depressions in tarmac block west of Elm Corner.
Kickxia elatine	Sharp-flowered Fluellen				2	Summer 2016	SWT: Found once during the 2016 survey, western end of the runway.
Lamium amplexicaule	Henbit Dead-nettle		✓			31.5.1989	SWT: Not seen during the 2016 survey and not recorded for 27 years, maybe overlooked and / or possible seed bank still present.
Lathyrus pratensis	Meadow Vetchling	✓	✓			19.6.2005	SWT: Not seen during the 2016 survey, likely to still be present in the longer grass to the west of the site.
Leontodon hispidus	Rough Hawkbit	✓				Summer 2016	
Leontodon saxatilis	Lesser Hawkbit	✓	✓			Summer 2016	
Leucanthemum vulgare	Oxeye Daisy	✓				Summer 2016	
Lotus corniculatus	Common Bird's-foot-trefoil	✓				Summer 2016	SWT: Common on short sward and cracks in runway.

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
Malva neglecta	Dwarf Mallow				2	Summer 2016	
Montia fontana	**Blinks**	✓	✓			Summer 2016	SWT: Recorded in 2016 on short sward western end of runway.
Myosotis discolor	Changing Forget-me-not	✓	✓			Summer 2016	SWT: Scattered over short sward and runway.
Myosotis ramosissima	Early Forget-me-not	✓	✓			Summer 2016	SWT: Scattered over short sward and runway.
Odontites vernus	Red Bartsia	✓				Summer 2016	
Odontities vernus ssp. serotina)	Red Bartsia	As above				28.7.2010	SWT: Seen in Snakes Field by local recorder.
Ophrys apifera	Bee Orchid	✓	✓			9.6.1993	
Origanum vulgare	Wild Marjoram	✓				30.7.2009	SWT: Seen in Snakes Field by local recorder.
Ornithopus perpusillus	Bird's-foot	✓	✓			Summer 2016	
Papaver dubium agg.	Long-headed Poppy				2 (if ssp. lecoquii)	19.7.2006	
Parentucellia viscosa	Yellow Bartisa		✓	VC17 Rare		19.7.2006	EPR: This species was not seen on the 2015 survey. It may still be present. The grassland areas are becoming more rank and less disturbed and this may not favour the species. SWT: As above, not seen in 2016.
Phleum bertolonii	Smaller Cat's-tail	✓					
Plantago	Buck's-horn	✓	✓			Summer	

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Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
coronopus	Plantain					2016	
Poa nemoralis	Wood Meadow-grass		✓				
Potentilla erecta	Tormentil	✓	✓	ERL Near Threatened / VC17 Rare		Summer 2016	SWT: Seen in Snakes Field by local recorder
Poterium sanguisorba	Salad Burnet		✓			31.5.1989	
Primula vulgaris	Primrose	✓	✓			19.7.2006	
Rhinanthus minor	Yellow-rattle	✓	✓			2.6.2010	SWT: Seen in Snakes Field by local recorder.
Rosa arvensis	Field Rose		✓			Summer 2016	
Rosa micrantha	Small-flowered Sweat-briar		✓			29.6.2008	
Rumex acetosa	Common Sorrel	✓	✓			Summer 2016	
Rumex acetosella	Sheep's Sorrel	✓				Summer 2016	
Saxifraga tridactylites	Rue-leaved Saxifrage		✓			Summer 2016	SWT: In short sward western end of runway.
Scleranthus annuus	**Annual Knawel**	✓	✓	UK BAP Priority Species & Species of Principal Importance (SPI) / GBRL: Endangered	8	4.6.2007	EPR: Not seen on the survey. Could still be present in the western end of the site as growing plants or seeds. SWT: Not seen in 2016, comments as above.
Sedum acre	Biting Stonecrop	✓	✓			Summer 2016	EPR & SWT: Common across the runway.
Senecio	Heath	✓	✓			19.6.2006	

Guildford Borough SNCI Surveys 2016: Existing Site

Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
sylvaticus	Groundsel						
Spergula arvensis	Corn Spurrey		✓	GBRL: Vulnerable	7	Summer 2016	EPR: A common and widespread arable weed in the southern part of the county. SWT: Recorded in 2016 survey on southern edge on arable field margin.
Spergularia rubra	**Sand Spurrey**	✓	✓			Summer 2016	
Stellaria graminea	Lesser Stitchwort	✓				Summer 2016	
Torilis nodosa	**Knotted Hedge-parsley**	✓	✓		3	Summer 2016	EPR: Not seen on the survey. The SBS location for this species is the hard standing area north of the runway. Probably present on the site as a casual colonising waste ground. Could still be present as growing plants or seeds. SWT: As above, not seen in the 2016 survey, but recorded by local recorder this year on central airstrip edge.
Tragopogon pratensis ssp. minor	Goat's-beard	✓				Summer 2016	
Trifolium arvense	Hare's-foot Clover	✓	✓			Summer 2016	
Trifolium striatum	**Knotted Clover**	✓	✓			11.7.2014	EPR: Not seen on the survey. SWT: No longer listed as a Surrey Rare Plant species by the SBS. Not seen in 2016.
Verbena officinalis	Vervain	✓				Summer 2016	
Veronica officinalis	Heath Speedwell	✓	✓	ERL: Near Threatened		6.10.2010	SWT: Seen in Snakes Field, path edge by local recorder (pers. comm.).

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Scientific Name	Common Name	Grassland Indicator Species[1]	Axiophytes[2]	County Notable, GBRL / England Red Data Lists (ERL)[3]	IAPA Score[6]	Date of Last Known Record	Surveyors Comments EPR 2015 and SWT 2016
Veronica montana	Wood Speedwell		✓				
Vulpia bromoides	Squirrel-tail Fescue		✓			Summer 2016	
Total		Total: 56 (of which 11 are in bold in SNCI guidelines)	Total: 62	UK BAP Priority Species / SPI :2 GBRL Endangered: 3 GBRL Vulnerable: 1 GBRL Near Threatened: 2 ERL Near Threatened: 4 VC17 Rare: 3 VC17 Scarce: 4	IAPA Score: 47 (33 2016)		

Appendix 1: Habitat guidelines

SNCI selection Habitat Guidelines (Gibbs, 2008), summary of results and rationale with the rationale based upon the findings of the survey.

Habitat	Notes	Result
1) Woodland		
a) All sites containing over 5ha of ancient semi-natural woodland (ASNW).		Not present.
b) Other ancient woodland including plantations on ancient woodland sites where there is a significant element of the original semi-natural woodland surviving.		Not present.
c) Areas of woodland which are not themselves ancient but which are immediately adjacent to ancient woodland sites should also be considered for selection.		Not present.
d) Other semi-natural woodland comprising important community types of restricted distribution in the county. This will include;		
e) Wet woodland falling within NVC types; W1, W2, W4c, W5, W6 and W7	Stratford Bridge Wood covering 5.08ha within the landowner boundary, is wet Alder wood. Although a full NVC was not undertaken, in the opinion of the surveyor, the woodland is likely to support W6 and W7 communities. 9 Ancient Woodland Indicators (AWI) were recorded here. Field Maple Hairy Brome Pendulous Sedge Remote Sedge	Criteria met for Stratford Bridge Wood.

Habitat	Notes	Result
	Bearded Couch Wood Spurge Bluebell Giant Fescue It is considered to be a UK BAP Priority Habitat / Habitat of Principal Importance (HPI) and is within a Biodiversity Opportunity Area (BOA) RO4 – River Wey (and tributaries).	
f) Lowland Beech, Yew and Box Woodland falling within NVC types; W12, W13, W14 and W15		Not present
g) Wealden gill woodland		Not present
h) Sites supporting a significant population of a species as discussed in the species guidance.	See Appendix 2.	
2) Wood Pasture, Parkland and Veteran Trees		
a) Wood pasture and parkland over 2ha which can demonstrate 3 or more of the features defined in the selection guidelines (Gibbs 2008) should be considered for selection.		Not present
b) Groups of 3 or more ancient or veteran trees as defined in the selection guidelines (Gibbs 2008) within 0.25ha.	There are several groups of over mature and mature trees present of the boundary of the site and add value to the site. They have not been described as ancient or veteran, however they are our potential ancient/veteran trees for the future.	Criteria not currently met.
c) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
3) Traditional Orchards		
a) Traditionally managed orchards of biodiversity value, as defined in the selection guidelines (Gibbs 2008).		Not present
b) Sites which support a significant	See Appendix 2.	

Habitat	Notes	Result
population of a species as discussed in the species guidance.		
4) Neutral Grassland		
a) All sites supporting the following NVC communities; MG4, MG5 or MG8.	NVC communities not unlikely to be present.	See below.
b) Grassland sites which support a high diversity of species typical of grassland of conservation interest in Surrey. As a guideline, sites which support 15 or more of the species listed in Table 1 including at least 2 of the species in bold are likely to be of SNCI quality.	As shown in Table 3 and Appendix 2 Criteria 24, Snakes Field meets the criteria to qualify as an SNCI in its own right. However it was surveyed here as part of a wider unit and as such contributes to the site as a whole. In addition, in the opinion of the surveyor, the disturbed grassland towards the western end of the site is likely to contain populations of 15 or more Grassland Indicator Species. EPR (2017) Technical Note 2 suggests '*There are small areas of disturbed grassland. For example, one is an area used for the A3 works compound, one was used for historic landfill, some are associated with ground works for building the runway and taxiways. There is much imported material in these areas. These grasslands may have 15 or more indicator species in them*.' Below are those Grassland Indicator Species recorded during the 2016 survey for Snakes Field. There are a total of 17 (none are bold). Bugloss Sweet Vernal Grass Wild Basil Lesser Stitchwort Common Eyebright Yellow Pimpernel Oxeye Daisy Rough Hawkbit Common Bird's-foot Trefoil Red Bartsia Wild Marjoram Bird's-foot Tormentil	Criteria met for Snakes Field. Criteria may be met with a restricted distribution in the western end of the runway.

Habitat	Notes	Result
	Yellow Rattle Common Sorrel Sheep's Sorrel Heath Speedwell Below are those Grassland Indicator Species recorded during 2016 from Wisley Airfield as a whole (note species recorded from Snakes Field or Stratford Bridge Woodland are not included here) total 39 (with 6 bold) and although they have a scattered distribution over the site and over several different habitat types (i.e. not necessarily all on neutral grassland) there is a concentration at the western end of the site. **Silver Hair-grass** – western end Early Hair-grass – western end Bugloss – on arable field edges/airstrip edges Sweet Vernal-grass Slender Parsley-piert – western end Thyme-leaved Sandwort – scattered across airstrip edge/western end Common Centaury – Scattered across site, rare **Little Mouse-ear** – western end **Southern Marsh-orchid** – 20+ in grassland edge of Stratford Bridge Woodland Square-stalked Willowherb Blue Fleabane Common Stork's-bill – scattered across runway and short swards/western end Common Cudweed – southern central Common Marsh-bedstraw – local in damp areas Small-flowered Crane's-bill – western end/airstrip Trailing St. John's-wort – arable field margin Square-stalked St. John's-wort Sharp-flowered Rush – wet depressions Elm Corner Jointed Rush – wet depressions Elm Corner Rough Hawkbit - scattered Lesser Hawkbit - scattered Oxeye Daisy Common Bird's-foot Trefoil – common short swards/airstrip/western end	

Habitat	Notes	Result
	Blinks – western end Changing Forget-me-not – common short swards/airstrip/western end Early Forget-me-not – common short swards/airstrip/western end Red Bartsia – western end Bird's-foot – western end Smaller Cat's-tail Buck's-horn Plantain – scattered across/western end Common Sorrel – scattered Sheep's Sorrel – scattered western end Biting Stonecrop – very common across airstrip/western end **Sand Spurrey** – southern central Lesser Stitchwort **Knotted Hedge-parsley** – central airstrip Goat's-beard Hare's-foot Clover – western end, southern central Vervain	
c) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
5) Acidic Grassland		
a) All sites supporting the following NVC communities; U1, U2, U3, U4 or U20a.	Sandy swards are part of the mosaic, and a very small area of U1 is likely to be present on the northern edge of Snakes Field. However a full NVC was not carried out. In addition EPR note on their Technical Note 2 that whilst they do not consider U1 grassland is present on the site, that they do recognise '*the open, ephemeral vegetation west of the runway is of conservation interest*.'	See Criteria 4) Neutral Grassland section.
b) Grassland sites which support a high diversity of species typical of grassland of conservation interest in Surrey. As a guideline, sites which support 15 or more of the species listed in Table 1 including at least 2 of the species in bold are likely to be of SNCI quality.	Several plant species on the SNCI Grassland Species Table 1 with affinities to an acid grassland have been recorded on the site, however as a majority are associated more with neutral grassland habitats it is discussed in detail in Criteria 4) Neutral Grassland section.	See above Criteria 4) Neutral Grassland category.
c) Sites which support a significant	See Appendix 2.	

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Habitat	Notes	Result
population of a species as discussed in the species guidance.		
6) Calcareous Grassland		
a) All sites supporting the following NVC communities: CG2, CG3, CG4, CG5, CG6 or CG7.		Not present.
b) Grassland sites which support a high diversity of species typical of grassland of conservation interest in Surrey. As a guideline, sites which support 15 or more of the species listed in Table 1 including at least 2 of the species in bold are likely to be of SNCI quality.		Not present as this is not a chalk grassland setting.
c) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
7) Heathland		
a) All areas of heathland vegetation; including matrices of dwarf shrub, bare ground, grassland, valley mires and scrub should be considered. Heathland over 2ha would automatically qualify.		Not present.
b) Areas of heathland which are heavily afforested or have succeeded to mature woodland with potential to be restored to heathland and either; • retain sufficient remnants of heathland or • are contiguous with, or form		Not present.

Habitat	Notes	Result
an integral part of an area of heathland.		
c) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
8) Standing open water		
a) Any lake classified by the UK Lakes HAP joint steering group as Tier 1 or Tier 2 where not already covered by other designations.		Not present.
b) Ponds which qualify under the criteria for UK BAP priority habitat.		Not present.
c) Water bodies or clusters of water bodies which support a significant population of a species as discussed in the species guidance.	See Appendix 2 Criteria 19 c) where the value of Pond 3 is presented.	Criteria met, for Pond 3.
9) Wetlands		
a) All reedbeds over 2ha.		Not present.
b) Reedbeds of between 0.25 and 2ha where they form part of a wider habitat mosaic.		Not present.
c) Fens, mires, swamps and marshes over 2ha with flora characteristic of the following NVC communities: M6, M21, M24, M25, M27, M29, S3, S4, S5, S6, S7, S8, S9, S10, S12, S13, S14, S15, S16, S19, S22, S23, S26, S27, S28.		Not present.
d) Fens, mires, swamps and marshes (NVC as above) of between 0.25 and 2ha where they form part of a wider habitat mosaic.		Not present.

Habitat	Notes	Result
e) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
10) Floodplain Grazing Marsh		
a) All floodplain grazing marsh over 5ha that is not designated as SSSI.		Not present.
b) Floodplain grazing marsh of less than 5ha where it forms part of a wider habitat mosaic of water-dependent habitats, or where it links SSSIs.		Not present.
c) Sites which support a significant population of a species as discussed in the species guidance.	See Appendix 2.	
11) Rivers, Canals and Streams		
a) Chalk stream.		Not present.
b) River classed by the Environment Agency as Grade A within the GQA.		Not present.
c) River with a HMS of 0 (classified as “pristine” by RHS).		Not present.
d) River with a conservation evaluation of either “Critical” or “Important” within strategic RCS.		Not present.
e) River which supports viable populations or spawning sites of animals listed in guidelines.		Not present.
f) Sites which support a significant population of a species as discussed in the species guidance	See Appendix 2.	
12) Open Mosaic Habitats on Previously Developed Land		
a) Open Mosaic habitat sites where; • 6 or more of the	Sites where 6 or more of the characteristic features listed (in the SNCI Guidelines) would qualify as an SNCI for this criteria. The relevant features found on this site are Floristic & habitat diversity, Soil type and	Criteria met for the

Habitat	Notes	Result
characteristic features are found • form part of a wider complex of similar areas, providing long term habitat opportunity • There is a significant invertebrate assemblage	structure, Topography, Succession, Bare ground and Shelter. There is very good potential for a significant invertebrate assemblage, although the current survey data does not support this last statement. The western end of the runway is of potential conservation interest for this habitat type. There are also other areas of with characteristic features scattered across the rest of the site, and whilst on their own are not significant, could be seen as important as part of a complex mosaic of habitats within the site as a whole. In addition when using the criteria set out in the UK Biodiversity Action Plan Priority Habitat Descriptions: Open Mosaic Habitats on Previously Developed Land (July 2010) it is suggested that each of the criteria are met, listed below: 1 The area of open mosaic habitat is over 0.25ha in size. 2 There is a known history of disturbance of soil, spoil. 3 The site contains some early successional communities including annuals, ruderal and open grassland. 4 The site contains unvegetated, loose bare substrate and pools may be present. 5 The site shows spatial variation, forming a mosaic of communities. Open mosaic habitats are considered UK BAP Priority Habitat / Habitat of Principal Importance (HPI). Although scattered across the site the main areas are towards the western end of the runway and on the southern boundary by Hyde Lane (track).	western part of the site.
b) Sites which support a significant population of a species as discussed in the species guidelines.	See Table 3 and Appendix 2 Criteria 24.	
13) Arable		
a) Meets criteria for Important Arable Plant Areas and not covered by other designation.	The score for those plants seen in 2016 is calculated to be 33, which indicates that the site is of County Importance. The overall score for species found across the site since 1985 is 47, this places it in the category for qualifying for Plantlife Important Arable Areas for Site of UK Importance. The arable weeds that have been recorded over the site do have a restricted, scattered distribution across the whole of the site. Although questions have been asked as to the 'arable' nature of some of these records SWT ES feel that the fact that some are on the site this is an indicator of both current and potential value of this habitat. The	Criteria is met as the IAPA score would suggest that Wisley Airfield is of UK /County Importance.

Habitat	Notes	Result
	ephemeral nature of arable plants makes evaluation of the distribution of these species in a single year difficult to assess. Whilst some of these species have not been seen in the last few years, with a little disturbance or correct climate conditions there could well be resurgence in populations. Although it is acknowledged that current management is unlikely to produce this. This is backed up by the Plantlife (2005) Important Arable Plant Areas '*For practical purposes records dating back to 1985 may be considered*.' EPR (2017) Technical Note 2 also state that '*The IAPA score, for the species we have information on, is indicative of potential County Importance*.' With the proviso that they have '*a very restricted distribution and almost all are absent from nearly all of the arable lands, therefore almost all have no arable species of conservation interest at all*.' Bugloss – 1 – last seen Wisley Airfield across the site 2016 Loose Silky-bent – 6 – last seen Wisley Airfield arable fields 2014 Slender Parsley-piert – 1 – last seen Wisley Airfield western end 2016 Cornflower – 8 – last seen Wisley Airfield arable fields 2016 Common Stork's-bill – 1 – last seen Wisley Airfield scattered across 2016 Common Cudweed – 6 – last seen Wisley Airfield southern central 2016 Small-flowered Crane's-bill – 2 – last seen Wisley Airfield 2016 Sharp-leaved Fluellen – 2 – last seen Wisley Airfield arable fields 2016 Dwarf Mallow – 2 – last seen on arable edges southern/north of runway 2016 Annual Knawel – 8 – last seen Wisley Airfield 2007 Corn Spurrey – 7 – last seen Wisley Airfield southern central 2016 Knotted Hedge-parley – 3 – last seen Wisley edge central strip 2016	The majority of the records have restricted, scattered distribution from the arable fields, runway and western end of the site.
b) Supports a significant population of a species as discussed in the species guidance.	See above, Table 3 and Appendix 2 Criteria 24.	

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Habitat	Notes	Result
14) Scrub Communities When selecting sites based on other habitats all areas of associated scrub should be identified and included within the SNCI boundary.	Scrub communities present on the site have been included in the proposed SNCI boundary. EPR in their Technical Note 2 note that the scrub areas are located principally towards the western end of the site, on parts of former fields, adjacent to other habitat areas including we woodland and ponds that potentially meet the SNCI selection criteria. Where relevant and appropriate, these areas of scrub could be considered for inclusion within any SNCI selection.	Criteria met for scattered areas of scrub on a variety of different habitats.
15) Community and access a) Sites which serve as Accessible Natural Greenspace within urban areas. Sites which are close to but do not fully meet the habitat or species guidelines may be considered for selection if they meet this criteria.	This site is not open to public except for a couple of public footpaths.	Criteria not met.
16) Geology and Geomorphology RIGS regarded as the geological equivalent of SNCIs.		Not applicable.

Appendix 2: Species guidelines

SNCI selection Species Guidelines (Gibbs, 2008), summary of results and rationale based upon survey

Species	Notes	Result
17) Mammals Sites with known populations of:		
a) Dormouse	Unknown, there are pockets of potential woodland habitat.	Unknown.
b) Water Vole	Stratford Brook is very shaded and currently unlikely to support Water Vole. They are thought to be functionally extinct in Surrey.	Unknown, but unlikely.
c) Otter	Stratford Brook does have potential suitable habitat, but Otters are not thought to be resident in Surrey currently.	Unknown, but unlikely.
Additional information	The RPS report Wisley Airfield, Surrey: Badger Survey (RPS 2013) states that 6 setts were identified during the 2013 re-survey. Two active, one 'disused' main sett, an active annex, a subsidiary sett and an outlier sett.	Additional information only, no criteria set for this species.
18) Mammals – Bats		
a) Contains a 'significant' bat breeding roost or hibernation site.	Recent surveys have not suggested that this is present. EPR in their Technical Note 2 that '*No bat records were returned from within the site boundary, although records of Brown Long-eared, Common Pipestrelle, Natterer's, Noctule, Soprano Pipestrelle and Whiskered bats were returned from the data search area of the 10km grid square in which the site occurs*.'	Unlikely. No 'significant' bat breeding roosts or hibernation sites have been recorded at the site.
b) Any breeding roost or hibernation site used by multiple bat species concurrently.	Recent surveys have not suggested that this is present. See also EPR comment from above.	Unlikely. No breeding roost or hibernation site used by multiple bat species concurrently at the site.

Species	Notes	Result
c) Foraging sites with more than 5 species recorded or used by Annex II species.	RPS (2013) Bat Survey report states '*The site was assessed has having 'High' bat interest' and that 'The vegetated boundaries of the site (tree avenues, hedgerows, scrub corridors and woodland), were found to be the area of most value to bats on the site bring of 'High' bat interest. These three keys area provide a variety of habitats for bats to forage and commute. No bats were detected in the open arable fields during the three activity surveys which suggest these habitats offer limited foraging and commuting opportunities*.' During the 2013 surveys a total of five species were recorded - Common Pipistrelle, Soprano Pipistrelle, Myotis sp, Serotine and Noctule. During the 2016 EPR Bat Survey four to five species were recorded on each survey, mostly from Common and Soprano Pipistrelle bats – Common Pipistrelle, Soprano Pipistrelle, Noctule, Myotis sp., Nathusius Pipistrelle & Leisler's bats.	This suggests that the criteria has been met. The main areas of interest for bats are the western end and along the southern edge.
19) Amphibians		
a) Supports populations of Natterjack Toad.	Habitat not present.	Not present.
b) Regularly record 'good' or 'exceptional' breeding populations of Great Crested Newt.	Recent records indicate that there are Great Crested Newts close to the site to the south and north. However, they have not currently been found in the site. EPR (2017) state in the Technical Note 2 that '*On-site ponds do not support breeding GCN. On-site terrestrial habitat is used by GCN from one or more off-site breeding ponds but the breeding population is not 'Good' or 'Exceptional'*.' No 'Good' or 'Exceptional' breeding populations have been recorded.	Does not currently meet the criteria.
c) Supports populations of four or more native amphibian species.	The updated EPR (2015) Amphibian survey states '*survey work has identified that areas potentially supporting up to four amphibian species within the site are limited to ponds 2 and 3 and suitable connected terrestrial habitat (i.e. the northern, western and south western part of the site only*).' The data from the EPR (2013 & 2015) surveys identified Smooth Newt, Common Toad and Common Frog on the site. In addition Great Crested Newt have also been found on the site, although not found to be breeding in the ponds, and by unrelated surveys on Surrey Wildlife Trust land to the north and it could be suggested that '*this may represent a potential metapopulation*.' (D Winchester, SWT ES/SARG pers. comm.).	Criteria met for Pond 3.

Species	Notes	Result
d) 'Exceptional' populations of any amphibian species.	Not present.	Does not meet criteria.
e) 'Good' populations of 3 or more native amphibian species.	Not recorded during site surveys.	Does not meet criteria.
20) Reptiles		
a) Supports populations of Smooth Snake or Sand Lizard.	Suitable habitat for supporting populations of Smooth Snake or Sand Lizards are not present and were not recorded in the Reptile Survey.	Not present.
b) Populations of 3 or more native reptile species.	RPS (2013) Reptile Survey comments that the site supports 'Low' Populations of Adders and Common Lizard and a 'Good' Populations of Slow-worms and Grass Snakes. EPR (2015) Reptile Survey concludes that the site supports 'Low' Populations of Slow-worm, Common Lizard and Grass Snake. EPR (2016) Reptile Survey comments that the site supports a 'Good' Populations of Slow-worm and Common lizard and 'Low' Population of Grass Snake. The site qualifies as a key reptile site under Froglife guidelines (Froglife, 1999).	Criteria met, reptile interest is confined to the western part of the site and the northern boundary.
c) 'Exceptional' population of a single reptile species or a 'good' population of Adders	Present, but not recorded as exceptional.	Criteria not met.
d) Assemblage of species scoring at least 4 points.	EPR (2017) Technical Note 2 state that '*Using the 2013 data those parts of the site where reptiles occur score six points, using the 2015 data the site scores four points and using the 2016 data the site scores five points*.'	Criteria met, reptile interest is confined to the western part of the site and the northern boundary.
21) Birds		
a) Holds more than 10% of Surrey's breeding or wintering population of a species.		Not present.
b) Supports species on the conservation concern list for Surrey categories 1-3.	EPR bird surveys do not record any breeding or wintering birds from the relevant table in the SNCI Guidelines (Gibbs, 2008).	Criteria not met.
c) Supports a breeding bird assemblage or wintering waterbird assemblage of county importance.	Using the relevant table in the SNCI Guidelines (Gibbs, 2008) the confirmed wintering and breeding birds as listed in the RPS (2013) surveys do not currently satisfy the criteria.	Criteria not currently met.
22) Invertebrates		

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Species	Notes	Result
a) Supports one or more nationally rare or declining species as listed in the latest national Red Data Books or lists.	EPR state that '*an updated invertebrate survey was carried on from May – September 2013'*, and in that report the author states that '*a full invertebrate survey was undertaken'*. 44 invertebrates were recorded over 6 visits. The updated Invertebrate Survey 2016 found 73 species, recorded on a single site visit during July. However it is of the opinion of two local entomologists who know Wisley Airfield that the site does have potential to be of conservation interest for invertebrates.	Further invertebrate survey work is recommended over several days during a full season by an experienced entomologist to ascertain the conservation status for Wisley Airfield for invertebrates.
b) Supports an important assemblage or population(s) of a BAP priority species.	See above, possible.	Unknown, potential.
c) Supports an important assemblage or population(s) of a nationally scarce species.	See above, site shows good potential.	Unknown, potential.
23) Additional Invertebrate Guidelines		
a) Meet the British Dragonfly Society criteria for Key Dragonfly Sites	Very few water feature opportunities.	Unlikely.
b) Supports a butterfly species within list A.	Unknown.	Unlikely.
c) Supports a locally notable population of four or more of the butterfly species within list B.	Unknown.	Unlikely.
d) Sites with a Species Quality Score of greater than 4 for Wasps, bees & Ants.	RPS (2013) Invertebrate Survey identified no Red Data Book species, however a more detailed invertebrate survey is required to ascertain the conservation status for the site.	Unknown.
24) Vascular Plants		

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Species	Notes	Result
a) Supports one or more species included in the latest national Red Data List for plants.	See Table 1 & Table 3 lists. 6 species of GB and England Red List species have been recorded in the Wisley Airfield (excluding Snakes Field) since 2007, with 2 being recorded during 2016 surveys. <u>Wisley Airfield (not including Snakes Field)</u> *Loose Silky-bent – GBRL NT – last seen arable field edges 2014 *Hairy Rock-cress – ERL NT – last seen western end 2014 ***Common Cudweed – GBRL NT – last seen southern central 2016** ***Corn Spurrey – GBRL V – last seen southern central 2016** Annual Knawel – GBRL E – last seen 2007 * i.e.4 GBRL / ERL since 2014, thus meeting the criteria. Two of which were recorded during the 2016 survey. EPR (2017) Technical Note 2 state '*A small population of between 20-50 plants of Near Threatened (NT) Common Cudweed on one verge on the southern site of the site (a single plant was recorded close to this population by was later washed away and not refound). The other was single plants in two locations of the Vulnerable (VU) arable weed Corn Spurrey recorded on the south edge of the site amongst rank grassland.'* <u>Snakes Field only</u> Common Eyebright – ERL NT – last seen 2010 Tormentil – ERL NT – last seen 2016 Heath Speedwell – ERL NT – last seen 2010 ** i.e. 2 ERL NT since 2010, thus meeting the criteria.	Criteria met, for species found scattered distribution across Wisley Airfield and also Snakes Field.
b) Supports an important assemblage or population(s) of a UK BAP priority species.	Two UK BAP Priority Species / Species of Principal (SPI) Importance of plant have been recorded at the site. Cornflower was last recorded in 2016 and Annual Knawel was last seen in 2007 at Wisley Airfield.	Whilst present, unlikely to be considered 'important' on their own.
c) Supports a nationally scarce species.	No Nationally Scarce species have been recorded on this site.	Criteria not met.

Species	Notes	Result
d) Supports species identified by Surrey Botanical Society as rare and notable within Surrey.	See Tables 1 and 3. <u>Wisley Airfield (excluding Snakes Field)</u> *Loose Silky-bent – last seen arable field edges 2014 *Hairy Rock-cress – last seen western end 2014 ***Cornflower – last seen arable fields 2016** Red-tipped Cudweed – last seen 1968 ****Common Cudweed – last seen southern central 2016** ***Common Ramping-fumitory – last seen 2016** Heath Cudweed – last seen Elm Corner 1988 Yellow Bartsia – last seen Elm Corner 2006 Annual Knawel – last seen 2007 ****Corn Spurrey – last seen southern central 2016** * 6 seen since 2014 across Wisley Airfield ** 2 seen during the 2016 survey <u>Snakes Field only</u> Common Eyebright – last seen 2010 Heath Speedwell – last seen 2010 Tormentil – last seen 2016	Criteria met, for species found scattered distribution across Wisley Airfield and also Snakes Field.
e) Sites selected as Important Arable Plant Areas by Plantlife.	Not selected by Plantlife.	Not selected by Plantlife.
25) Lower Plants & Fungi		
a) Supports one or more nationally rare or declining species as listed in the national Red Data Books.	No survey has been undertaken.	Unknown.
b) Supports an important assemblage or population(s) of UK BAP priority species.	No survey has been undertaken.	Unknown.
c) Supports a nationally scarce species.	No survey has been undertaken.	Unknown.
d) Sites classified as Important Fungus Areas by Plantlife.	Not survey has been undertaken.	Not selected.
e) Sites classified as Important Stonewort Areas by Plantlife.	No survey has been undertaken.	Not selected.

Appendix 3: General guidelines

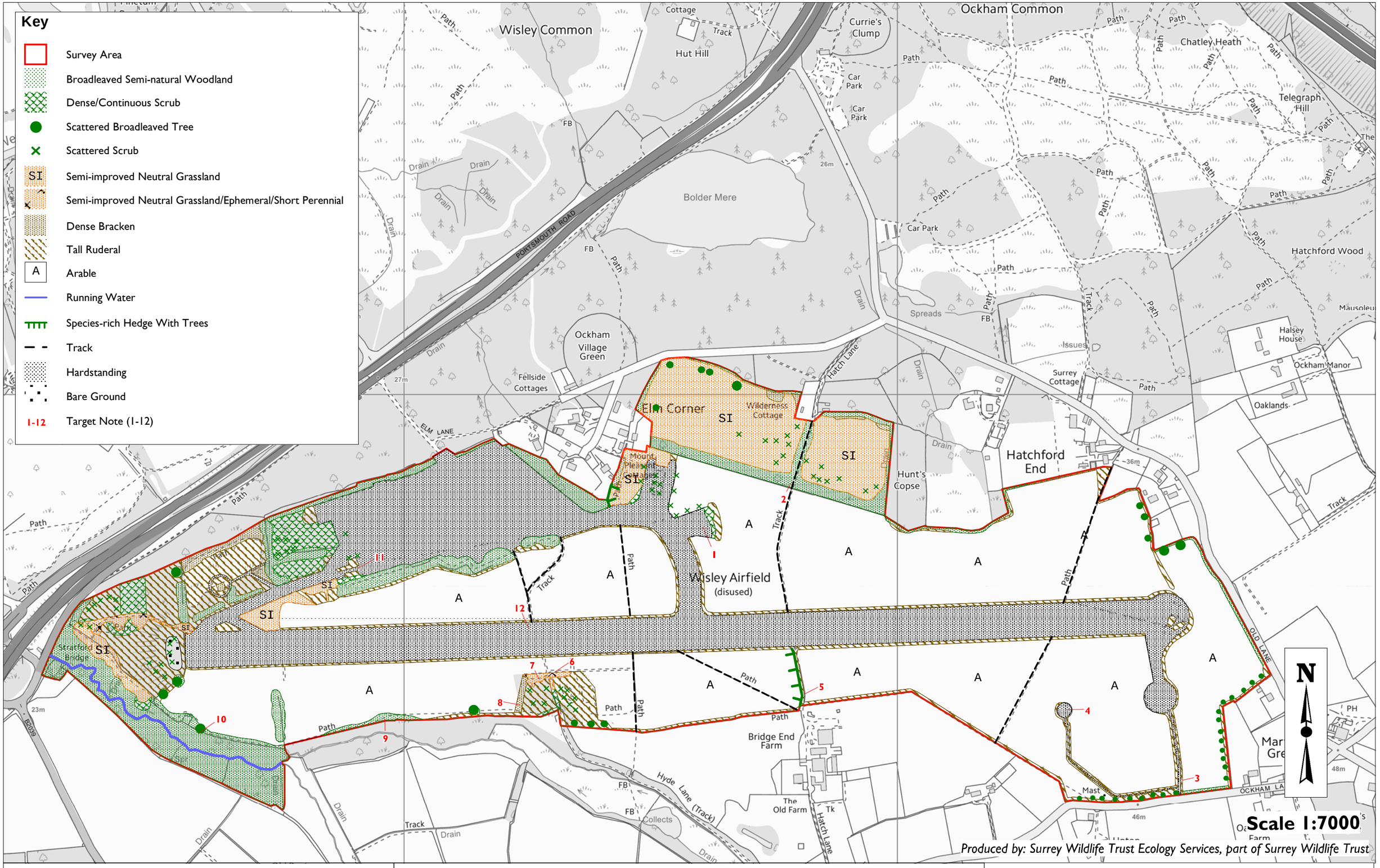
Sites which are close to, but do not quite met the detailed habitat and species guidelines later in the report may be considered for selection where they are judged as important using the general guidelines below.

These general guidelines are based upon the Ratcliffe Criteria (1977), for assessing the nature conservation value of a proposed SNCI with the rationale based upon the findings of the survey.

Selection Criteria	Analysis of site against criteria
Rarity	The following rare or scare habitats were recorded wet Alder woodland, arable fields and criteria may be met for Open Mosaic Habitat. Rare plants with conservation status have been recorded.
Diversity	The site is considered to be botanically and structurally diverse.
Size	The site 123 ha in size, representing a large area.
Naturalness	The site is an old airfield with a runway running down the centre of the site. Other parts of the site are taken up by working arable fields. Deliberately planted non-native species and accidentally introduced invasive plant species are present these being Butterfly-bush, Himalayan Balsam and Japanese Knotweed.
Typicalness	The habitat is not typical of the surrounding area, although there are other arable fields and connecting woodland close by.
Fragility	The site is large enough to be sustained. The areas of annual and ruderal communities require occasional disturbance.
Replacability	It would be very difficult to replicate the unique mosaic of habitats and species present on the scale.
Position in ecological unit / Connectivity with the landscape	The site falls within a network of similar arable fields to the south and mixed woodland to the north. The Stratford Brook and woodland continues its course to the south of the site. The site is therefore well connected to other habitats. The Stratford Brook and surrounding woodland is within a BOA RO4 – River Wey and tributaries.
Educational value and value for the appreciation of nature.	The site is not currently open to the public other than two public footpaths.

Guildford Borough SNCI Surveys 2016: Existing Site

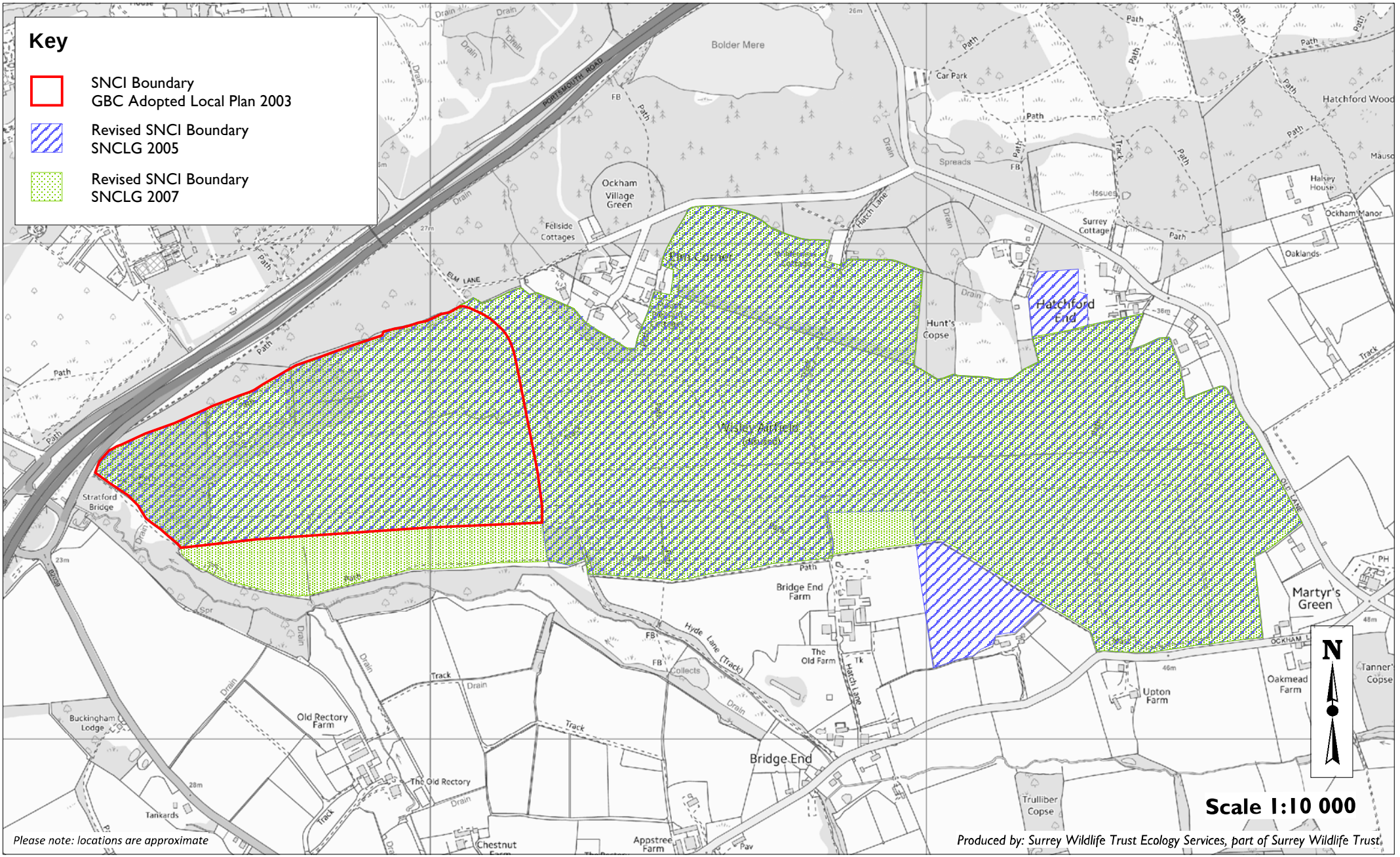
Selection Criteria	Analysis of site against criteria
Potential value	This sites acts as a buffer to the nearby SPA and is a key arable site. The value of the site is in its rare habitats, plants and other groups. Continued sympathetic management will help to secure the site for the future. Joined up management of the wider area will also help to enhance the future of the area.
Recorded history and cultural associations	Several local organisations have recorded over the site over many years including Surrey Amphibian and Reptile Group (SARG) and particularly Surrey Botanical Society (SBS) (previously Surrey Flora Committee).



January 2017

Figure 1
Wisley Airfield
Phase 1 Survey Results

SURREY wildlife TRUST



January 2017

Figure 2
Wisley Airfield
SNCI Boundary History

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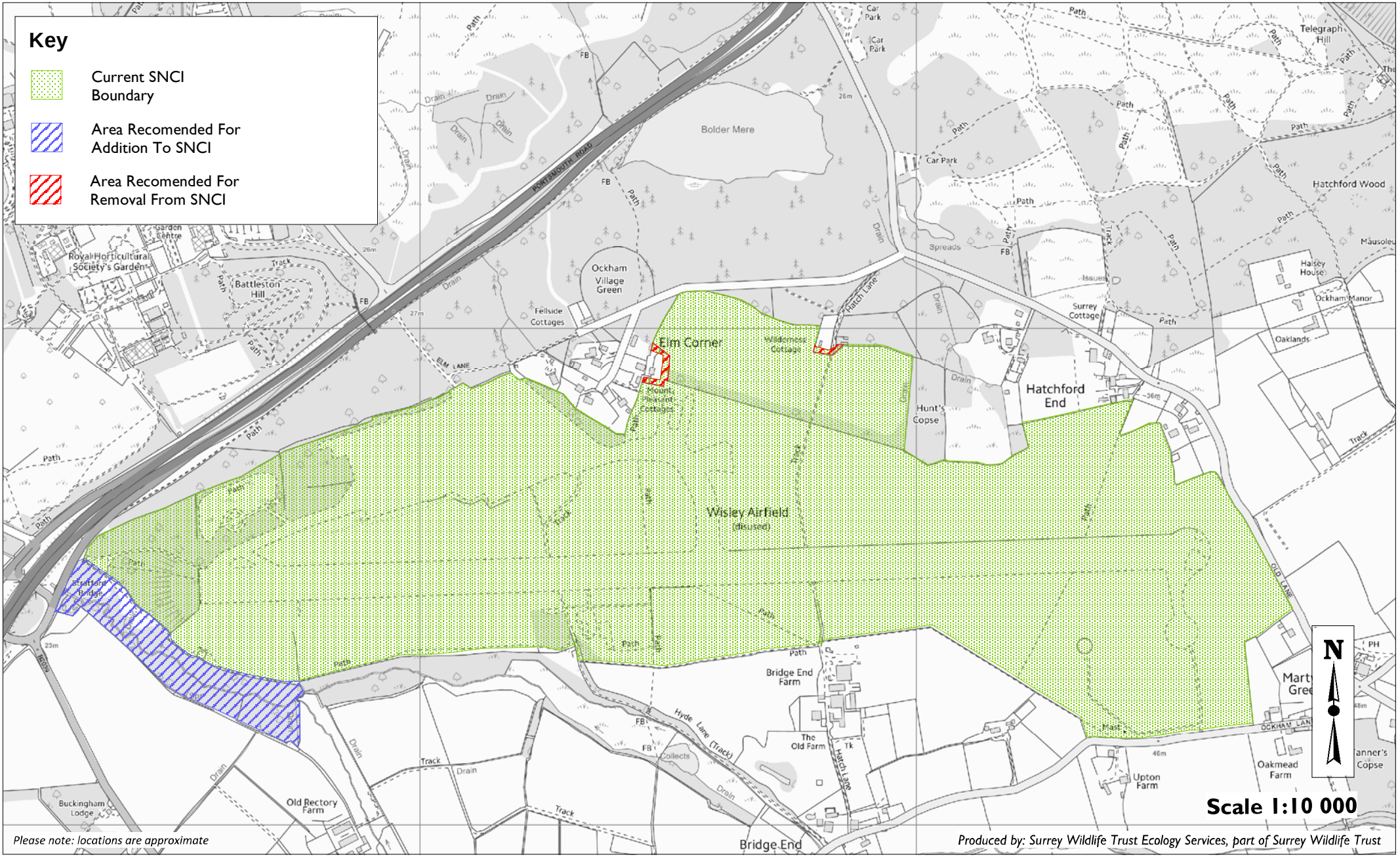

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Figure 3
Wisley Airfield
Boundary Changes For
Consideration By Local Sites Partnership

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