



Banstead Downs

Site Management Plan

2024-2033

SWT Ecology Services was commissioned by the Banstead Commons Conservators to prepare ten-year management plans for Banstead Commons. This project was kindly sponsored by the Reigate and Banstead Community Infrastructure Levy Fund.

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Contents

1	Vision statement	5
2	Summary	6
3	Introduction.....	15
3.1	Background.....	15
3.2	Scope of work	15
4	Legislative and planning policy framework.....	15
5	The site.....	15
6	Site information and baseline conditions.....	16
6.1	Designated sites.....	16
6.2	Site within the wider area.....	17
6.3	Public access/amenity value.....	17
6.4	Ecosystem services.....	18
6.5	Ownership and management responsibilities	18
6.6	Existing or planned agri-environment schemes and/or other agreements	18
6.7	Funding.....	18
6.8	Archaeology/scheduled ancient monuments	18
6.9	Recent management	19
6.10	Site restrictions.....	20
6.11	Geology and soils.....	20
6.12	Habitats.....	22
6.13	Species	29
7	Management plan features.....	36
7.1	Feature 1 – Grassland and scrub mosaic.....	36
7.2	Feature 2 – Woodland	45
8	Other focus points considered within this plan	50
8.1	Focus point A - Public access and amenity value.....	50
8.2	Focus point B – Legal and other obligations.....	51
8.3	Focus point C – Survey, monitor and review	55
9	Biodiversity net gain assessment	56
10	References and bibliography.....	57

Figures

Figure 1: Habitat baseline plan	7
Figure 2: Statutory and non-statutory designations.....	8
Figure 3: Natural England SSSI unit conditions	9
Figure 4: BNG habitat conditions (assessed on 06/06/2023)	10

Figure 5: Management map	11
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Tables

Table 1: Biodiversity gains	6
Table 2: Works programme	12
Table 3: Monitoring programme	14
Table 4: Statutory and non-statutory designated sites desk study results	21
Table 5: Habitat survey results.....	24
Table 6: Habitats in the survey area suitable for use by bats	32
Table 7: Target notes.....	35
Table 8: Feature 1 – grassland and scrub mosaic - management measures.....	43
Table 9: Feature 1 – grassland and scrub mosaic - targets and KPIs	43
Table 10: Feature 2 – woodland - management measures	49
Table 11: Feature 2 – woodland - targets and KPIs.....	49
Table 12: Public access and engagement – management measures.....	51
Table 13: Legal and other obligations – management measures	55
Table 14: Survey, monitor and review - management measures	56
Table 15: Biodiversity gains	57

List of Appendices (see separate document)

Appendix 1:	Site Background
Appendix 2:	Methodology
Appendix 3:	Vascular plant species recorded between 01/06/23 and 06/06/23
Appendix 4:	Scientific names of fauna species referred to in report
Appendix 5:	Habitat condition forms
Appendix 6:	Relevant legislation
Appendix 7:	Protected species and species of conservation concern desk study results
Appendix 8:	How to build a stag beetle loggery
Appendix 9:	Bat box information pack
Appendix 10:	How to build a hibernaculum
Appendix 11:	Banstead Downs HLS agreement mapping
Appendix 12:	European protected species checklist
Appendix 13:	Basic biosecurity protocols

Acronyms and abbreviations

Acronym	Definition
AONB	Area of Outstanding Natural Beauty
BCC	Banstead Commons Conservators
BNG	Biodiversity Net Gain
BOAs	Biodiversity Opportunity Areas
BoCC	Birds of Conservation Concern
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
DEFRA	Department for Environment, Food and Rural Affairs
HLS	Higher Level Stewardship
HMP	His Majesty's Prison
HPI	Habitats of Principal Importance
IEMA	Institute of Environmental Management and Assessment
KPI	Key Performance Indicator
LPA	Local Planning Authority
NERC	Natural Environment and Rural Communities
NPPF	National Planning Policy Framework
ODPM	Office of the Deputy Prime Minister
PRoW	Public Right of Way
SAC	Special Areas of Conservation
SBIC	Surrey Biodiversity Information Centre
SNCI	Site of Nature Conservation Importance
SPA	Special Protection Areas
SPI	Species of Principal Importance
SSSI	Site of Special Scientific Interest
SWT	Surrey Wildlife Trust
TPO	Tree Preservation Order

1 Vision statement

The vision for the site is to maintain an area rich in biodiversity supporting a mix of calcareous grassland, scrub and woodland in good condition supporting a range of species including invertebrates such as Small Blue butterfly and Roman Snail; amphibians and reptiles; bats; breeding birds such as Skylark; Badger and other mammals; and rare/notable vascular plants including Crosswort, Early Gentian and Common Rock-rose.

Favourable condition status will be achieved across all Site of Special Scientific Interest (SSSI) units, and the goals set within the Higher Level Stewardship (HLS) agreement will be achieved, with a focus on maintaining a calcareous grassland sward. Where resources enable this, less favourable areas within the SSSI will be enhanced.

The grassland and scrub complex will be managed so as to maintain a 60:40 mosaic, through conservation grazing supplemented by mechanical means, in order to maintain important microhabitats.

The woodlands will be managed such that they are free from high-risk invasive non-native species such as Cherry Laurel.

A clear and safe public right of way will be maintained across the commons, through maintenance of the Public Rights of Ways (ProWs) including the bridleways.

Public engagement will enable the public to become educated in the common land that they use, minimising antisocial activity and promoting respect for the land.

It is intended that this management plan will be a valuable resource to anyone with an interest in Banstead Downs and will help everyone work together towards the future wellbeing of the site. A flexible approach to management is important and, inevitably, the need for additional work may arise. In these circumstances, such tasks would be assessed according to the management objectives and priorities identified in this plan.

2 Summary

Surrey Wildlife Trust (SWT) Ecology Services was commissioned on 18 October 2022 by The Banstead Commons Conservators to prepare a management plan at Banstead Downs to cover the years 2024-2033.

The aim of the management plan is to assess the importance of the biodiversity recorded on the site and determine suitable management in order to further enhance biodiversity.

The following significant ecological features were identified on the site which have the potential to support locally, regionally, nationally and internationally important wildlife:

- Lowland mixed deciduous woodland.
- Lowland calcareous grassland.
- Individual trees (including mature trees and those developing veteran features).
- Mixed scrub.
- Other neutral grassland.
- Modified grassland supporting tall ruderal species.

Factors that were considered when producing this plan include:

- Value of these habitats and their potential to support notable species.
- Legal and other obligations (including statutory site obligations and agri-environment scheme requirements).
- Public access/amenity value.
- Monitoring and review.

Figure 1 presents the habitats recorded, and their condition is presented in Figure 4. Figure 5 presents the management measures. The works and monitoring programmes are detailed in Table 2 and Table 3.

The main body of the report provides background and describes the management measures.

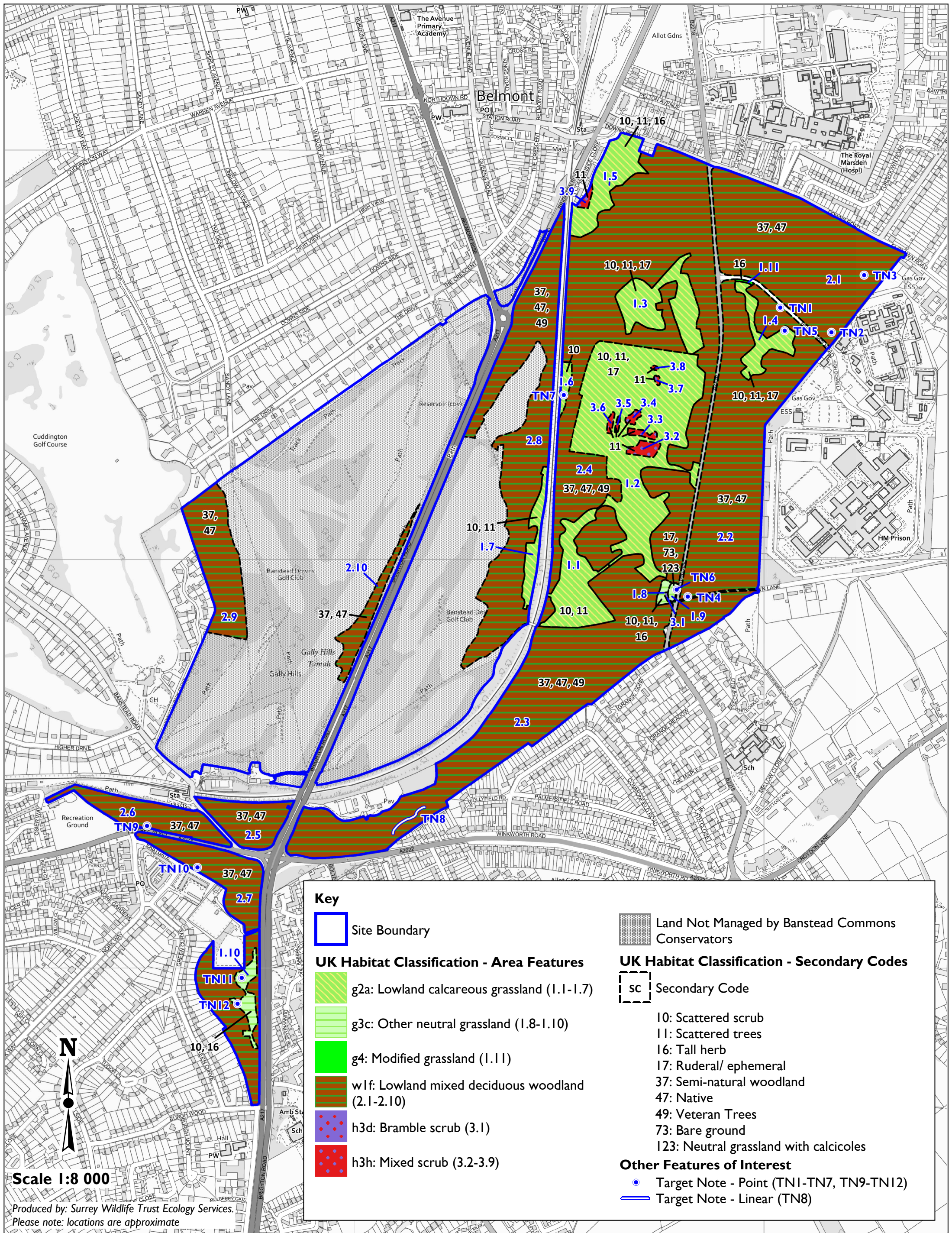
Table 1 details the biodiversity unit gains that could be generated as a result of implementing this management plan.

Table 1: Biodiversity gains

Headline results		Banstead Downs ¹
Onsite baseline	Habitat units	1526.08
Onsite post-intervention	Habitat units	1576.77
Total unit change	Habitat units	+50.69
Total % change	Habitat units	+3.32%

¹

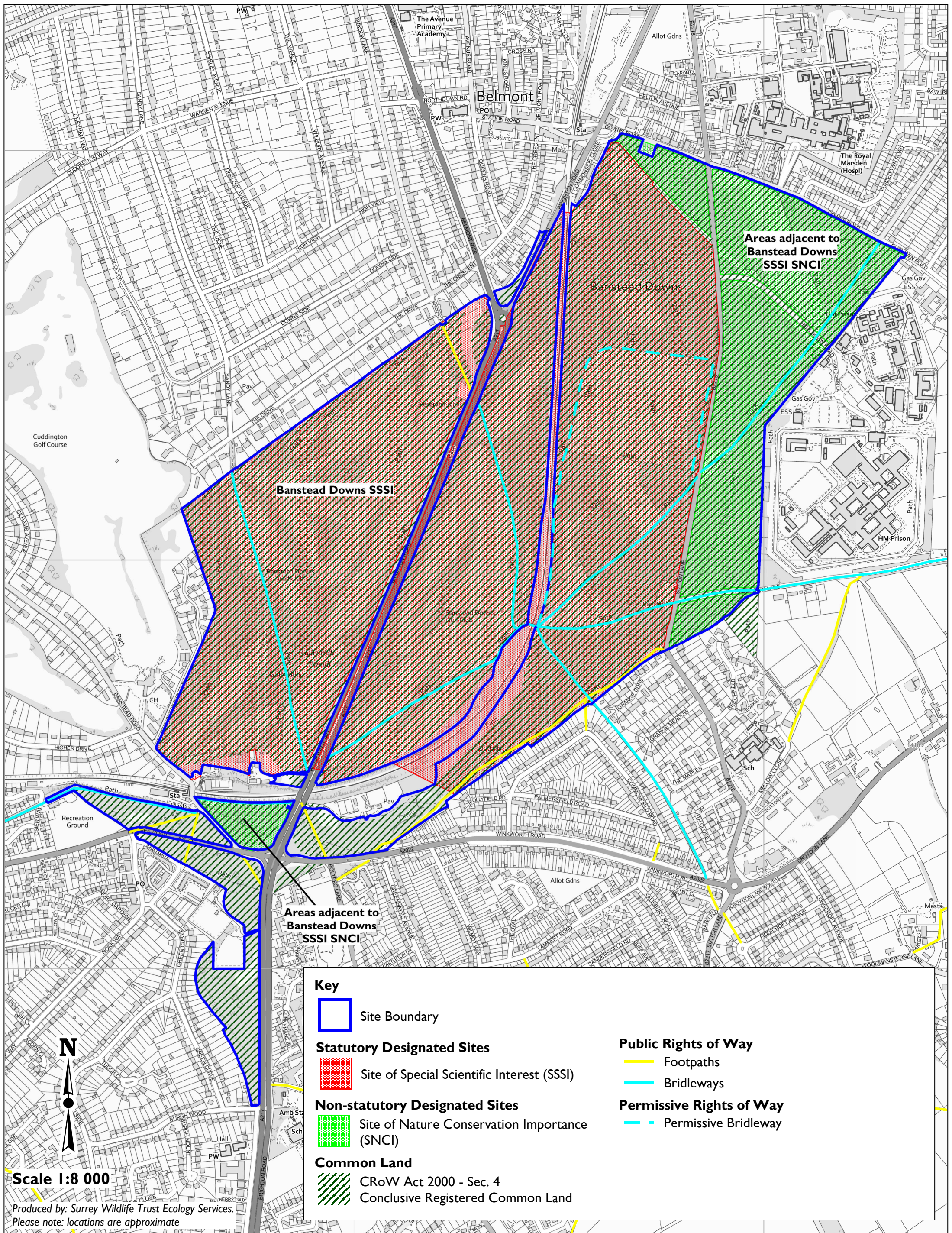
> 10 % gain	0 – 9% gain	< 0% gain
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**Figure I:
Banstead Downs -
Habitat Baseline Plan**
(Survey undertaken between 01/06/2023 & 06/06/2023)



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Figure 2:
Banstead Downs -
Statutory and Non-statutory
Designations

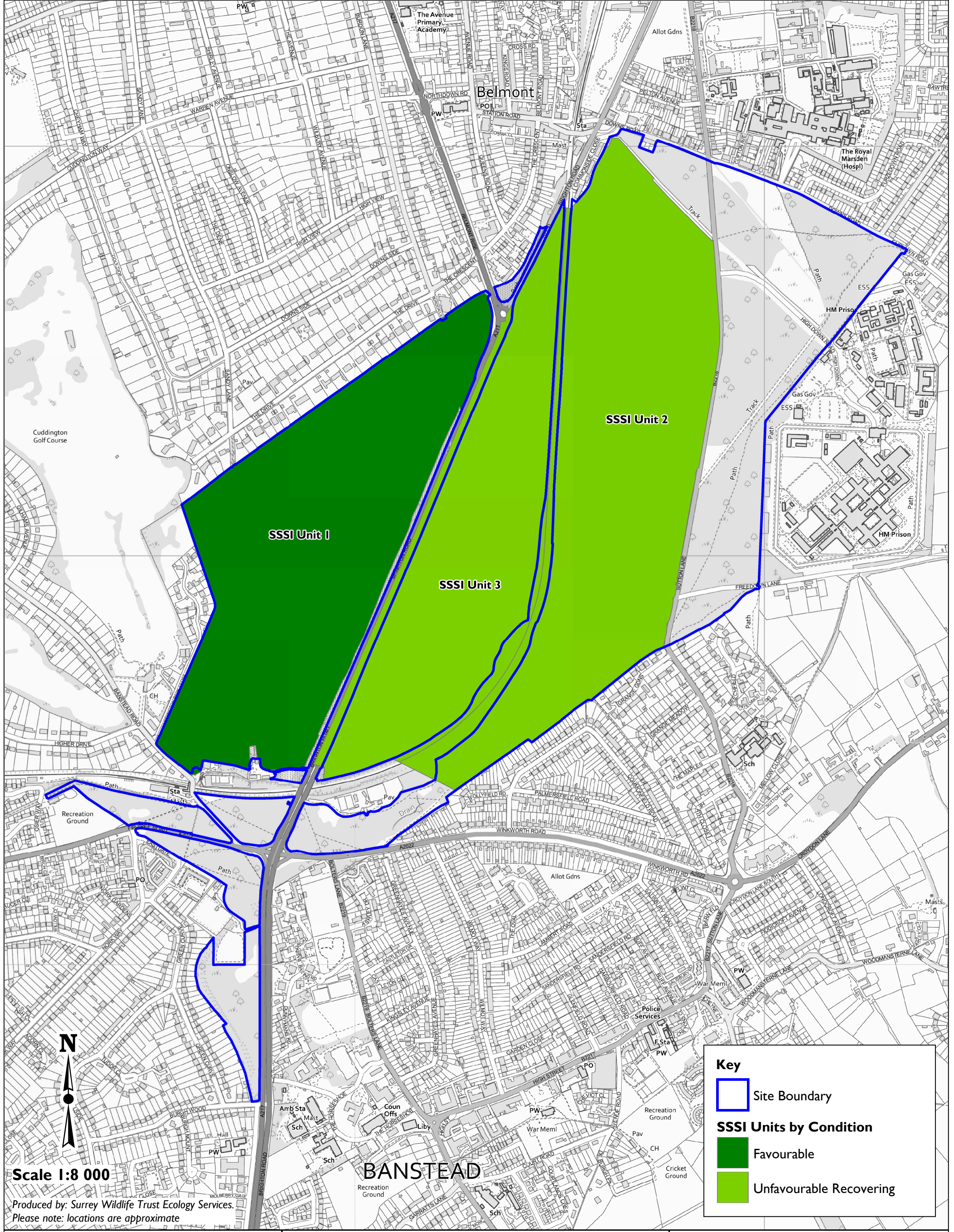
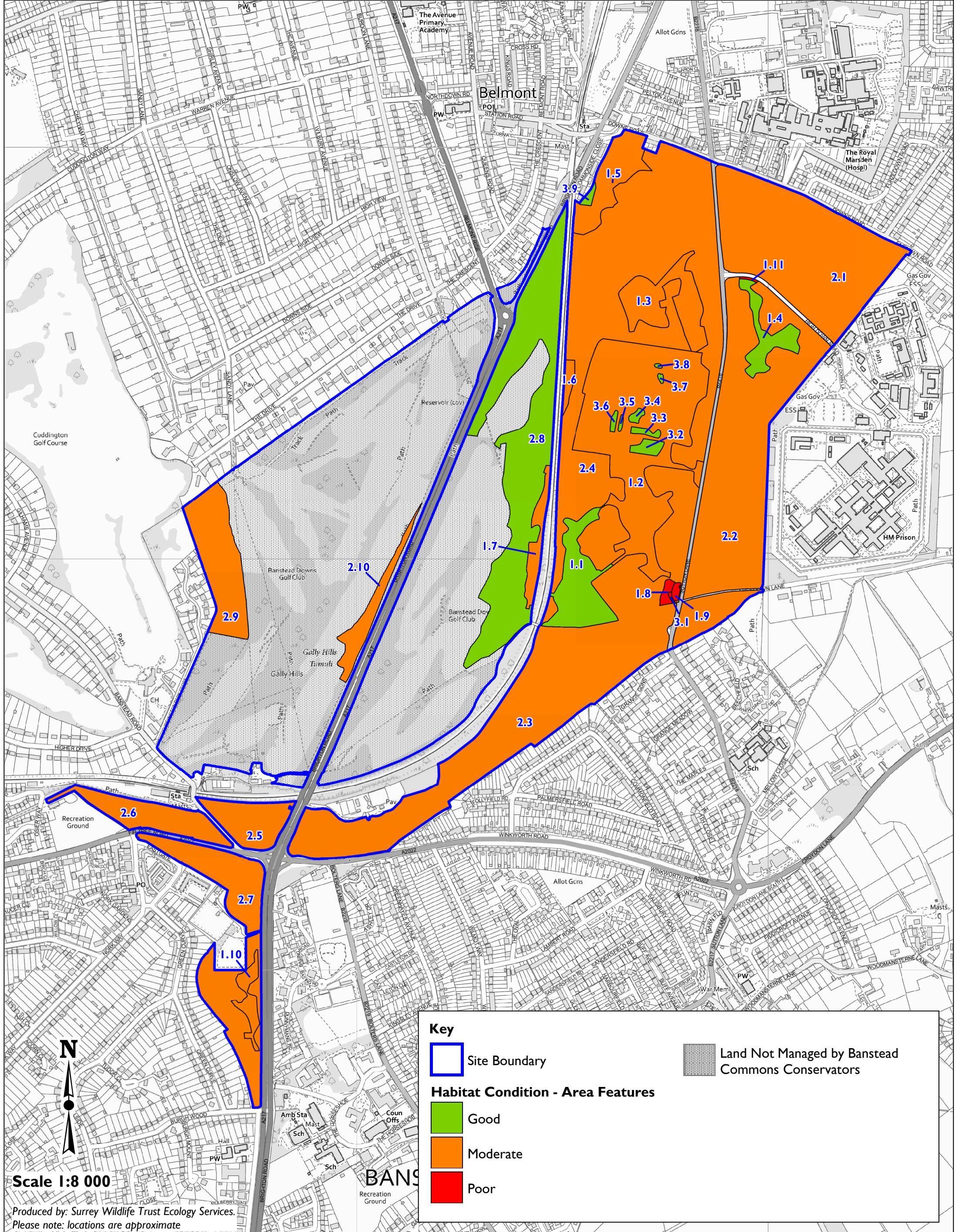


Figure 3:
Banstead Downs -
Natural England SSSI Unit Conditions
(Units 1 & 3 Assessed 2013, Unit 2 Assessed 2017)



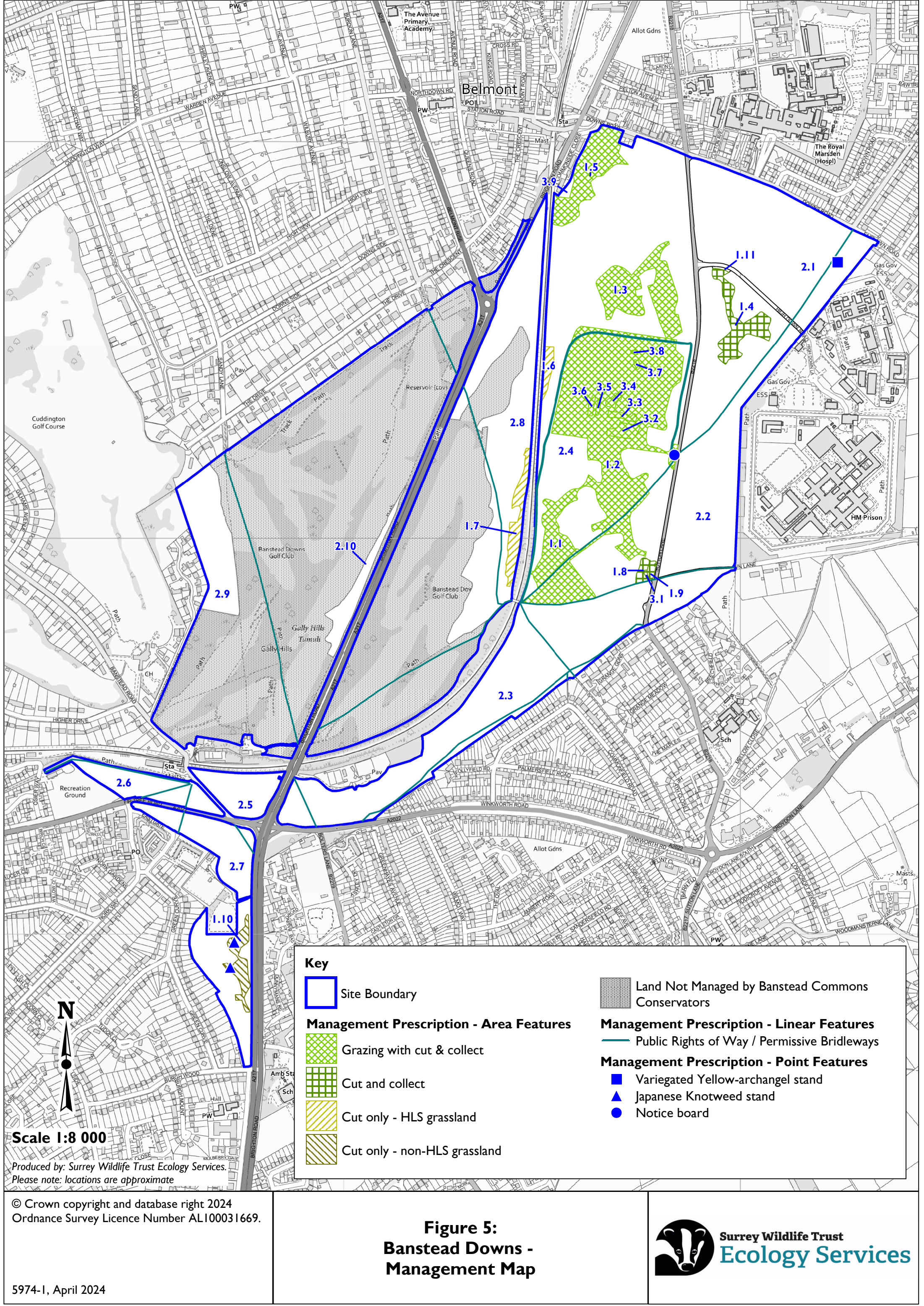
Scale 1:8 000

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Figure 4:
Banstead Downs -
BNG Habitat Conditions
(Assessed on 06/06/2023)





[illegible]

Table 3: Survey, monitor and review programme

[illegible]

3 Introduction

3.1 Background

SWT Ecology Services was commissioned on 18 October 2022 by the Banstead Commons Conservators to prepare a ten-year management plan for Banstead Downs for the years 2024-2033. The development of the site management plan was funded by the Reigate and Banstead Borough Council Community Infrastructure Local Fund and forms part of a larger project which will also see plans produced for the other sites managed by the Banstead Commons Conservators; Banstead Heath, Burgh Heath and Park Downs.

3.2 Scope of work

The scope of work includes:

- A review of existing information for the site including agri-environment schemes and past survey and monitoring data.
- A data search for biological records within the site and an appropriate buffer.
- A habitat survey following UK habitat classification methods.
- Condition assessment of the vegetation on site and calculation of baseline biodiversity units.
- An assessment of the likelihood of the site to support rare and/or protected species.
- Site visit and meeting with relevant staff.
- Identification of important features of the site and setting of objectives and targets.
- Description of management measures required to meet objectives and targets including a monitoring strategy.
- Ten-year work plan and associated mapping.

The information and data provided have been prepared in accordance with current best-practice guidance (CIEEM, 2022b), (CIEEM, 2021), (BSI, 2013) and (BSI, 2021). Our ecologists are bound by CIEEM's 'Code of Professional Conduct (CIEEM, 2022a). For the detailed methodology, see Appendix 2.

4 Legislative and planning policy framework

Certain designated sites, habitats and species are protected under UK legislation and planning policies. These have been taken into account when writing this plan and it is important that this is taken into account when carrying out management of the site or when planning any future improvements on the site. Section 0 considers legal and other obligations relevant to the management plan. Relevant legislation and planning policies are detailed in Appendix 6.

5 The site

The site, presented in Figure 1, is bounded by the residential land of Belmont to the north, the estate of HMP High Down to the east, the residential land of Banstead to the south, and Cuddington Golf Club to the west. It covers a total of ~170ha, of which ~102ha is managed by Banstead Commons Conservators (the remaining being managed by Banstead Downs Golf

Club). The survey area is located under the jurisdiction of Banstead and Reigate Borough Council.

Banstead Downs is a mixture of calcareous grassland in mosaic with dense mixed scrub and lowland mixed deciduous woodland (primarily oak canopy heavily influenced by Sycamore). Banstead Downs Golf Club manages the majority of the western half of the site, including the greens and fairways alongside the woodland and scrub edging these areas. As this land is not managed by Banstead Commons Conservators, it is not covered by this management plan, with the exception of all public rights of way (ProW) and two small areas detailed in Figure 1.

Much of the grassland in Banstead Downs managed by Banstead Commons Conservators has been mapped by Natural England as Lowland Calcareous Grassland within their Priority Habitat Index.

The majority of the land falls within Banstead Downs SSSI, an area to the east falling within the 'Land Adjacent to Banstead Downs SSSI' Site of Nature Conservation Importance (SNCI), and with only a section to the south falling outside of either designated site.

The survey area is all common land. The focus points of this management plan are all managed by Banstead Commons Conservators.

Further information on the site, along with historical information collected, is detailed in Appendix 1.

6 Site information and baseline conditions

6.1 Designated sites

Banstead Downs Site of Special Scientific Interest (SSSI), a statutory designated site, was notified in 1985 and comprises *“undulating downland on the dip slope of the North Downs escarpment.”* It contains a mixture of habitats including dense and scattered scrub, oak and Hazel woodland, and open chalk grassland within the golf course and other public open space. It was designated due to the diversity of habitats resulting in the site being important for breeding and overwintering birds, as well as its invertebrate assemblage. Additionally, it was designated due to its rich chalk flora, which includes several locally rare plant species.

The SSSI is fully contained within the Banstead Downs site and comprises three units. Of these, two have been assessed as Unfavourable – Recovering (Units 2 & 3), and one has been assessed as Favourable (Unit 1, which falls within the golf club land). It should be noted that these assessments were completed in 2013 and so the conditions of the habitats within each unit may have changed significantly since then as a result of continued management efforts (see Figure 3 for location of SSSI units and condition as assessed in 2013). A full description of the three units can be found in Appendix 1. It should be noted that since the SSSI unit condition assessment was last undertaken, Banstead Commons Conservators has undertaken management of the site which has significantly improved its condition.

The portion of Banstead Downs land east of Sutton Lane does not fall within the SSSI designation, however it has been selected as a SNCI known as 'Areas adjacent to Banstead Downs SSSI' SNCI, a non-statutory designated site. This comprises semi-natural broadleaved woodland, scrub and calcareous grassland. The SNCI was selected for its calcareous

grassland habitat which supports a high diversity of species. 30 species typical of grassland of conservation interest in Surrey have been recorded in the SNCI (Surrey Wildlife Trust, 2013). The SNCI acts as a buffer between Banstead Downs SSSI and the surrounding urban areas and serves as accessible natural greenspace for the residential area of Banstead.

6.2 Site within the wider area

In addition to the statutory and non-statutory designated sites within Banstead Downs itself, three non-statutory designated sites, comprising SNCI, were recorded within 1km of the survey area.

The distance of these sites from the survey area is presented in Table 4.

Biodiversity Opportunity Areas (BOA)

A number of BOA have been identified within Surrey. These areas are described by the Surrey Nature Partnership as “extensive areas where improved habitat management, as well as efforts to restore and recreate Priority habitats will be most effective in enhancing connectivity to benefit recovery of Priority species in a fragmented landscape. They are therefore the basis for achieving Sir John Lawton’s vision of a ‘coherent and resilient ecological network’ in Surrey.”

Banstead Downs is located within the North Downs; Banstead Woods and Chipstead Downs BOA.

The following habitats have been identified as important in the area statements for this BOA:

- Calcareous grassland.
- Mixed deciduous woodland.
- Beech & Yew woodland.
- Arable field margins.
- Hedgerows.

It will be important to take these habitats and species into account if relevant when considering the management of the site.

Banstead Downs additionally lies near to North Downs; Epsom Downs BOA.

6.3 Public access/amenity value

Banstead Downs is registered Common Land. There are many informal footpaths and public rights of way across the site. Horse riding is regulated on Banstead Downs and is permitted only on bridleways and permissive rides. The site is well-used and is particularly popular with dog walkers. .

Formal car parking is present by the entrance to the golf club, and there is free street parking along High Down Road (off Sutton lane) and Commonfield Road. Vehicles are not permitted on site without express permission by Banstead Commons Conservators (although golf buggies are used on the golf club land).

Banstead Downs is additionally popular with bike riders, namely mountain bikers. Access on bike is permitted along PRowS, however informal mountain bike routes have been set up

across woodland and grassland and publicised online via web apps. This includes areas of re-profiled terrain to create jumps.

Similar to above, the site is popular with dirt/mini biking, although this is not permitted and the activity carried out is illegal.

The woodland surrounding the grassland acts as a sound buffer, screening the site from the traffic noise generated by the busy A217 which passes directly through the commons. The grassland and woodland on site additionally provides a welcome respite to members of the public from the surrounding suburban environs.

6.4 Ecosystem services

Banstead Downs provides invaluable ecosystem services. As well as providing space for wildlife and natural processes such as nutrient cycling and photosynthesis, the site also contributes to sustainable drainage, flood and erosion control as well as contributing towards good air quality and carbon storage. Other important ecosystem services that the site provides includes cultural aspects such as its use for recreation and to improve people's physical health and mental wellbeing as well as providing a sense of place and opportunities for learning.

6.5 Ownership and management responsibilities

The site is owned by Reigate and Banstead Borough Council. The Banstead Commons Conservators are legally responsible for overall site management and maintenance. Reigate and Banstead Borough Council are responsible for rights and duties associated with land ownership, and management of highways trees. Verges are either managed by BCC or Surrey County Council depending on location.

6.6 Existing or planned agri-environment schemes and/or other agreements

The calcareous grassland and scrub mosaic within Banstead Downs SSSI (compartments 1.1-1.3, 1.5-1.9 and 3.1-3.9) is covered by a Higher Level Stewardship (HLS) agreement. The HLS agreement also covers a small area outside of the SSSI (compartments 1.4 & 1.11), to the east of Sutton Lane and west of the prison complex. Several woodland parcels also partially fall within the area covered by the HLS (compartments 2.2-2.4 and 2.8-2.9). A map of the areas covered by the HLS options is presented in Appendix 11. The aims of the HLS agreement have been incorporated into the feature objectives in this management plan.

6.7 Funding

In addition to the HLS funding described above, Reigate and Banstead Borough Council provides an operational grant to contribute towards the management of the site.

6.8 Archaeology/scheduled ancient monuments

Two scheduled ancient monuments lie within Banstead Downs, comprising two Saxon burial mounds within the woodland of Gally Hills (compartment 2.10 in Figure 1). There are four mounds in total, with each listing covering an adjacent pair. They have been listed as a scheduled ancient monument since 1926 and have survived well and are visible above ground to about 0.5-1.2m in height. One of the mounds was partially excavated in 1972.

While these mounds fall within the golf club land, the land they lie on is managed by Banstead Commons Conservators. Management activity undertaken at Gally Hills must not be damaging to these monuments.

6.9 Recent management

Banstead Downs has most recently been managed under a HLS agreement, primarily focussing on the calcareous grassland within the SSSI, with additional resources then focused on ad hoc management elsewhere within the site boundary, although due to limited funding and resource availability, this is minimal. An additional priority is managing the PRowWs to ensure that these are safe and clear. The management under the HLS has been undertaken for the last 13 years (originally a 10-year agreement, and now operating under a 5-year extension). A summary of activities include the below.

A combination of cut and collect and sheep grazing, where access to livestock is possible, and terrain is appropriate for the cut and collect machinery.

Sheep are grazed in temporary enclosures (with semi-permanent fence posts installed across the grassland, and electric fencing installed as required). Cut and collect is sometimes run after grazing.

Where terrain is not flat enough, the cut and collect machinery cannot be used. In any instances where it is not possible to graze said area (not all compartments are necessary grazed in a year due to resourcing restrictions), the grassland is mown with cuttings left in situ, as there is not sufficient resource to remove the cuttings manually. This particularly affects compartment 1.7 which is badly damaged by illegal biking activity, and there is a risk to livestock if grazing here due to risk of motorbike collision.

Maintaining dense scrub coverage of 30-40% of the overall grassland mosaic areas within the SSSI, through grazing or cutting.

The HLS agreement does not include the woodland, however Banstead Commons Conservators have been managing this as a low priority, where resources allow, e.g. standard woodland management practices of opening paths and undertaking thinning. This only occurs irregularly.

The PRowWs across Banstead Downs are also managed for health and safety, keeping them clear of obstructions e.g. fallen branches, deep puddles etc. This includes PRowWs that pass through the golf course land.

Butterfly activity is monitored regularly, through the longest running butterfly transect in Surrey. Other species monitoring surveys are done on occasion including fungal and botanical surveys.

The grassland in the recently acquired area to the south (compartments 1.10, 2.5, 2.6 and 2.7) is managed on an ad hoc basis due to a lack of funding and resources. This low priority area is mown on an irregular basis with the cuttings left in situ.

Oak Processionary Moth is present across the site and is managed through manual removal using appropriate Personal Protective Equipment where resources allow.

The antisocial behaviour on site (mini biking and mountain biking, horse riding off bridleways, barbeques, and fire pits etc.) are known to Banstead Commons Conservators, who currently manage for this through signposting and actively reporting incidents to the local council and police, however this is an ongoing issue which appears to be difficult to prevent despite interventions.

Tree inspections are carried out according to the BCC Tree Inspection Policy and Methodology.

Prior to the HLS agreement, the site was grazed by sheep under a Downland Trust grant.

All management is undertaken in house, using a small two-man team under the direct employment of Banstead Commons Conservators.

6.10 Site restrictions

Banstead Downs comprises all of the land within the blue line boundary presented in Figure 1. The BCC do not manage the areas of land within this blue line boundary that form part of the Banstead Downs Golf Club, with the exceptions maintaining the Public Right of Ways and Gally Hills Tumuli. Without the prior consent of the Conservators and Reigate and Banstead Borough Council, Banstead Downs Golf Club must not do anything in contravention of the Metropolitan Commons Banstead Supplemental Act 1893, its associated bye laws, or any other statutory or public regulations. The HLS agreement restricts certain actions within the grassland (refer to agreement for details).

Grazing is limited by what livestock can be feasibly included in the commons without causing incidents (currently this has been limited to sheep or goats). In addition, not all areas of calcareous grassland within the SSSI are easily accessible to livestock.

The ability to cut and collect is limited by terrain – the machinery can only run on flat or lightly sloping terrain. It cannot run where terrain is steep and highly variable.

Another restriction highlighted by the Banstead Conservators is the funding available to carry out management on the site. Income is received through the Higher Level Stewardship scheme for Park Downs, Banstead Heath and Banstead Downs. In addition some funding is provided by Reigate and Banstead Borough Council to manage all four sites. This allows the Banstead Conservators to employ just two full time staff and two part-time staff to manage over 500ha of land over the four sites; Banstead Downs, Banstead Heath, Burgh Heath and Park Downs. The limited funding means that management tasks need to be prioritised and it may not be possible to carry out all recommendations.

6.11 Geology and soils

According to (Cranfield Soil and Agrifood Institute, 2023), Banstead Downs lies free draining slightly acid but base-rich soils, and this is reflected in the chalky substrate present across the site, supporting calcareous grassland. This soil has a low stored carbon content and drains to groundwater.

According to (BGS, 2023), Banstead Downs is situated on the Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation, which is chalk sedimentary bedrock formed between 93.9 and 72.1 million years ago during the Cretaceous period.

Table 4: Statutory and non-statutory designated sites desk study results

Site name	Brief description	Distance from survey area (m)
Statutory designated sites		
Banstead Downs SSSI	Notified in 1985. <i>“This site consists of undulating downland on the dip slope of the North Downs escarpment. It comprises extensive areas of dense and scattered scrub, woodland and areas of open chalk grassland most of which are golf course and public open space. The diversity of habitats makes this an important site for breeding and overwintering birds, and several groups of invertebrates are also present. In addition the site supports a rich chalk flora, including a number of locally rare plants.”</i>	Within the site
Non-statutory designated sites		
Areas adjacent to Banstead Downs SSSI SNCI	Semi-natural broadleaved woodland, scrub and grassland (with calcareous species). The site is selected for its calcareous grassland habitat which supports a high diversity of species. 30 species typical of grassland of conservation interest in Surrey have been recorded on the site. The site acts as a buffer between the adjacent Banstead Downs SSSI and the surrounding urban areas. The site serves as accessible natural greenspace for the residential area of Banstead.	Within the site
Nork Park SNCI	Selected for mosaic of habitats including semi-improved calcareous and neutral grassland. 33 species typical of grassland of conservation interest in Surrey have been recorded on the site since 2008.	860
Howell Hill Nature Reserve SNCI	Semi-improved calcareous grassland and scrub. Mosaic of habitats including old chalk spoil heaps, grassland and scrub, supporting chalk downland flora.	895
Northey Fields SNCI	An area of four arable fields divided by hedges. Some scattered scrub and planted trees. Adjacent to the SWT nature reserve Howell Hill. A site of County importance for arable plants due to the presence of a number of Nationally Threatened species including narrow-fruited cornsalad (<i>Valerianella dentata</i>) (Endangered) and prickly poppy (<i>Roemeria argemone</i>) and common cornsalad (<i>Valerianella locusta</i>) (Vulnerable). The site also exhibits a high general level of species richness.	960

6.12 Habitats

Desk study

Habitats recognised within SSSI and SNCI citations

The following habitats are recognised within the SSSI and SNCI citations for the site:

- Lowland calcareous grassland (the primary habitat for the SSSI designation).
- Lowland mixed deciduous woodland (acknowledged as important in mosaic with lowland calcareous grassland).
- Dense scrub (acknowledged as important in mosaic with lowland calcareous grassland).

Waterbodies

Two waterbodies are present within Banstead Downs:

- **WB1:** A pond within the golf club land, not managed by Banstead Commons Conservators, and not considered within this management plan (TQ 2471 6049).
- **WB2:** A drainage ditch within the woodland outside of the SSSI (compartment 2.3), dry at the time of survey, connecting to land outside of the survey area via a culvert. This dry ditch will be considered along the woodland management prescriptions as part of the woodland compartment (TQ 2514 6037).

In addition, two waterbodies were recorded within 500m of the survey area. these are listed below:

- **WB3:** A ditch connected to WB2 via culvert, approximately 20m from the survey area (TQ 2498 6023).
- **WB4:** A possible fishing pond approximately 430m southeast of the survey area (TQ 2636 6069).

No records of Great Crested Newt have been made within these waterbodies.

Other small garden waterbodies that were not on available mapping may be present within the 1km search area.

Ancient woodland and veteran trees

No parcels of ancient woodland were identified within Banstead Downs.

One parcel of ancient woodland was identified within 1km of the survey area, of which the closest is 0.9km away. This parcel totals 1.2ha.

A number of trees were recorded within the lowland mixed deciduous woodland habitats in the survey area exhibiting several veteran features including:

- Supporting dead wood, fungi and macrohabitats in bark and crevices.
- Having a large girth for that species.

The surveyor was not trained in arboricultural survey methods, and an accurate count of veteran trees possibly present has not been recorded. The woodland compartments where these potential veteran trees have been identified are detailed in Table 5 below. No trees within the survey area have been recorded as ancient or veteran within the Ancient Tree Inventory (Woodland Trust, 2023).

Habitat survey results

Five habitat types were recorded during the habitat survey. The locations of these are presented in Figure 1. A summary of each habitat is provided in Table 5.

Table 5: Habitat survey results

Habitat and code	Compartment number	Description	Condition ²	HPI ³
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees)	1.1	<p>Tall grassland sward with bare ground footpaths weaving across, showing the soil with its calcareous character through exposed stone. Trampled areas at bottleneck points with more neutral species such as Perennial Rye-grass, particularly on and around the footpaths where dog walkers frequent, but overall typical calcareous sward. Small pockets of scattered scrub are present, both creeping over the grassland and in upright stands, including Dogwood, Hawthorn and roses. The grassland is an Upright Brome sward, with additional Meadow Oat-grass, Rough and Smooth Meadow-grass and Cock's-foot. In lesser amounts, there is Meadow Fescue, Yorkshire-fog, Quaking-grass and Annual Meadow-grass.</p> <p>There are several scattered rural trees, which where meeting the requirements detailed in (Natural England, 2023a), have been mapped individually as rural trees (see further below).</p> <p>Grassland species include: Agrimony, Barren Brome, Sweet Vernal-grass, Kidney Vetch, Thyme-leaved Sandwort, Daisy, False Brome, Quaking-grass, Upright Brome, Soft Brome, Hairy Bitter-cress, Glaucous Sedge, Common Knapweed, Common Mouse-ear, Cock's-foot, Bindweed, Wild Strawberry, Cleavers, Crosswort, Lady's Bedstraw, Common Rock-rose, Meadow Oat-grass, Horseshoe Vetch, Yorkshire-fog, Perforate St John's-wort, Common Cat's-ear, Rough Hawkbit, Perennial Rye-grass, Common Bird's-foot-trefoil, Black Medick, Common Chickweed, Wild Marjoram, Ribwort Plantain, Greater Plantain, Annual Meadow-grass, Smooth Meadow-grass, Tormantil, Creeping Cinquefoil, Salad Burnet, Cowslip, Bulbous Buttercup, Creeping Buttercup, Wild Mignonette, Greater Yellow-rattle, Common Sorrel, Small Scabious, Meadow Fescue, BIAgger Champion, Dandelion, Red Clover, White Clover, Gorse, Germander Speedwell, Wood Speedwell, Heath Speedwell and Common Vetch.</p> <p>In addition, some scattered scrub of Dogwood, Hawthorn, Bramble, Field Rose and in-field tree seedlings including Pedunculate Oak.</p> <p>Within Banstead Downs SSSI.</p>	Moderate	Yes
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees), 17 (ruderal/ephemeral)	1.2	<p>Connected to 1.1 by a narrow strip between 2.3 and 2.4, see Figure 1. The grassland is similar to 1.1, however there is a higher distribution of localised ruderal vegetation, namely Common Nettle, Hogweed and Hemp-Agrimony, as well as higher levels of scattered scrub. This is possibly due to a more neutral influence around areas of high traffic, such as bottlenecks in footpaths, where there may be a higher concentration of dog fouling, although it could also be indicative of a relaxation in management to allow for the generation of scrub habitat. The majority of the area is still a typical calcareous sward, growing tall and tussocky in areas. Bare ground is mainly associated with the footpaths, however there are small, localised areas scattered throughout, caused by rabbit activity.</p> <p>Grassland species include: Agrimony, Barren Brome, Kidney Vetch, False Brome, Upright Brome, Soft Brome, White Bryony, Hairy Bitter-cress, Glaucous Sedge, Common Knapweed, Common Mouse-ear, Creeping Thistle, Hawthorn, Cock's-foot, Bindweed, Hemp-Agrimony, Dropwort, Wild Strawberry, Cleavers, Crosswort, Lady's Bedstraw, Herb-Robert, Wood Avens, Ground-ivy, Common Rock-rose, Meadow Oat-grass, Hogweed, Horseshoe Vetch, Yorkshire-fog, Perforate St John's-wort, Common Cat's-ear, Hoary Ragwort, Common Ragwort, Meadow Vetchling, Rough Hawkbit, Oxeye Daisy, Perennial Rye-grass, Common Bird's-foot-trefoil, Field Wood-rush, Wild Marjoram, Mouse-ear Hawkweed, Ribwort Plantain, Smooth Meadow-grass, Rough Meadow-grass, Creeping Cinquefoil, Salad Burnet, Pedunculate Oak, Bulbous Buttercup, Creeping Buttercup, Yellow-rattle sp., Field Rose, Dog Rose, Sweet-briar, Bramble, Common Sorrel, Small Scabious, White Champion, BIAgger Champion, Dandelion, Red Clover, White Clover, Gorse, Common Nettle and Germander Speedwell, Wood Speedwell, Heath Speedwell.</p> <p>Within Banstead Downs SSSI.</p>	Moderate	Yes
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees), 17 (rudera/ephemeral)	1.3	<p>Connected to 1.2 via two footpaths passing through 2.4 (see Figure 1). Grassland character is similar to the more shaded areas of 1.2, although the calcareous indicator species are fewer, with a lower species diversity overall. There is a higher proportion of Perennial Rye-grass, and this may be due to the narrower and smaller area being less able to buffer against dog fouling. Supports some localised swathes of ruderal and scrub growth, particularly Common Nettle and Bramble, covering areas >5% of the total grassland. There are some damper, shaded areas which as a result support plants suited to wetter conditions such as Wild Angelica and Meadowsweet although overall the grassland is dry in character.</p> <p>Grassland species include: Agrimony, Silver Birch, False Brome, Upright Brome, Glaucous Sedge, Common Knapweed, Common Mouse-ear, Creeping Thistle, Traveller's-joy, Hawthorn, Cock's-foot, Bindweed, Hemp-Agrimony, Dropwort, Lady's Bedstraw, Common Rock-rose, Hogweed, Horseshoe Vetch, Yorkshire-fog, Perforate St John's-wort, Hoary Ragwort, Rough Hawkbit, Perennial Rye-grass, Common Bird's-foot-trefoil, Ribwort Plantain, Smooth Meadow-grass, Rough Meadow-grass, Tormantil, Salad Burnet, Cowslip, Pedunculate Oak, Bulbous Buttercup, Yellow-rattle sp., Sweet-briar, Bramble, Common Sorrel, Small Scabious, Lesser Stitchwort, Dandelion, Red Clover, Common Nettle and Germander Speedwell.</p> <p>Within Banstead Downs SSSI.</p>	Moderate	Yes

² According to the Biodiversity Net Gain (BNG) 4.0 criteria in (Natural England, 2023b). NB: this does not relate to the SSSI unit condition, which is measured under different criteria.

³ Habitat of Principal Importance.

Habitat and code	Compartment number	Description	Condition ²	HPI ³
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees), 17 (ruderal/ephemeral)	1.4	A clearing within 2.2, calcareous soil but has some localised neutral character. Bare ground <5%. Species include: Sycamore, Sweet Vernal-grass, False Brome, Upright Brome, Glaucous Sedge, Common Knapweed, Common Mouse-ear, Rosebay Willowherb, Traveller's-joy, Dogwood, Hawthorn, Cock's-foot, Bindweed, Hemp-Agrimony, Dropwort, Crosswort, Wood Avens, Ground-ivy, Common Rock-rose, Meadow Oat-grass, Hoary Ragwort, Rough Hawkbit, Oxeye Daisy, Common Bird's-foot-trefoil, Field Wood-rush, Common Chickweed, Wild Marjoram, Ribwort Plantain, Annual Meadow-grass, Salad Burnet, Pedunculate Oak, Bulbous Buttercup, Yellow-rattle, Field Rose, Bramble, Common Sorrel, Groundsel, Dandelion, Red Clover, Gorse, Germander Speedwell, Heath Speedwell. Within Areas adjacent to Banstead Downs SSSI SNCI.	Good	Yes
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees), 16 (tall herb)	1.5	Calcareous grassland with similar species to the other parcels further south – mainly Upright Brome, Cock's-foot and Meadow-grass grassland. Has large areas of tall grassland interconnected by short-mown paths which support higher amounts of Perennial Rye-grass and Annual Meadow-grass. Bramble and Common Nettle are scattered to high amounts. The tall grassland areas do not have much variation in height and structure. Species include: Sycamore, Agrimony, Barren Brome, Cow Parsley, False Brome, Upright Brome, Glaucous Sedge, Common Knapweed, Common Mouse-ear, Hawthorn, Cock's-foot, Meadowsweet, Cleavers, Lady's Bedstraw, Cut-leaved Crane's-bill, Wood Avens, Meadow Oat-grass, Horseshoe Vetch, Yorkshire-fog, hybrid Bluebell, Common Ragwort, Rough Hawkbit, Wild Privet, Perennial Rye-grass, Common Bird's-foot-trefoil, Green Alkanet, Ribwort Plantain, Greater Plantain, Annual Meadow-grass, Rough Meadow-grass, Salad Burnet, Pedunculate Oak, Bulbous Buttercup, Field Rose, Bramble, Common Sorrel, Broad-leaved Dock, Tall Fescue, Dandelion, Red Clover, White Clover, Common Nettle, Germander Speedwell and Common Vetch. Within Banstead Downs SSSI.	Moderate	Yes
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub)	1.6	Mostly short rabbit-grazed grassland with bryophytes and exposed chalky ground where trampled, with small areas of longer sward ~20% of area, and scattered scrub. Species include: Daisy, False Brome, Quaking-grass, Upright Brome, Glaucous Sedge, Common Knapweed, Creeping Thistle, Dogwood, Hawthorn, Cock's-foot, Dropwort, Lady's Bedstraw, Common Ivy, Meadow Oat-grass, Common Cat's-ear, Rough Hawkbit, Common Bird's-foot-trefoil, Mouse-ear Hawkweed, Ribwort Plantain, Annual Meadow-grass, Salad Burnet, Selfheal, Bulbous Buttercup, Bramble, White Clover and Germander Speedwell. Within Banstead Downs SSSI.	Moderate	Yes
g2a: lowland calcareous grassland Secondary code: 10 (scattered scrub), 11 (scattered trees)	1.7	An area of grassland used (without permission) as a dirt bike/mountain bike course, with a resulting large amount of exposed bare ground and disturbance. Rabbit grazing also present. The land undulates, creating damper shaded areas in combination with more exposed, drier areas. Much of this topographical variety is artificial, illegally created as part of the bike course. Sward diversity is fairly minimal – the topography prevents cut and collect. Species include: Sycamore, Agrimony, Wild Angelica, False Oat-grass, False Brome, Quaking-grass, Upright Brome, White Bryony, Glaucous Sedge, Common Knapweed, Rosebay Willowherb, Creeping Thistle, Spear Thistle, Traveller's-joy, Dogwood, Hawthorn, Cock's-foot, Male Fern, Hemp-Agrimony, Dropwort, Wild Strawberry, Crosswort, Common Ivy, Hogweed, Perforate St John's-wort, Common Ragwort, Rough Hawkbit, Oxeye Daisy, Wild Privet, Fairy Flax, Perennial Rye-grass, Common Bird's-foot-trefoil, Black Medick, Wild Marjoram, Mouse-ear Hawkweed, Ribwort Plantain, Greater Plantain, Annual Meadow-grass, Smooth Meadow-grass, Rough Meadow-grass, Salad Burnet, Selfheal, Bulbous Buttercup, Yellow-rattle, Dog Rose, Bramble, BIAgger Champion, Hedge Woundwort, Wild Thyme, White Clover, Germander Speedwell and non-native Firethorn. Within Banstead Downs SSSI.	Moderate	Yes
g3c: other neutral grassland secondary code: 10 (scattered scrub), 11 (scattered trees), 16 (tall herb)	1.8	A tall sward surrounded by 2.3. Perennial Rye-grass is abundant on the mown footpath. The eastern section forms an ecotone with neighbouring Common Nettle and Bramble (3.1), and west of the path is a sward of taller grassland, showing more neutral character than the other grasslands present in the survey area. Yellow-rattle sp. is present, and over time with appropriate management, this area may transition to a restored calcareous grassland. However, insufficient calcareous species are present for this to be classified as calcareous grassland currently. Species include: Hedge Bindweed, Cock's-foot, Black Bryony, Dove's-foot Crane's-bill, Hogweed, Perennial Rye-grass, Ribwort Plantain, Creeping Buttercup, Yellow-rattle, Broad-leaved Dock, Meadow Fescue, Red Campion, Common Nettle, Germander Speedwell. Within Banstead Downs SSSI.	Poor	No
g3c: other neutral grassland secondary code: 17 (ruderal/ephemeral), 73 (bare ground), 123 (neutral grassland with calcicoles)	1.9	A highly disturbed area with bare ground, mosses and trampled ground. There is evidence of recent burning though the cause was not obvious. Species present are indicative of a higher nutrient level than the calcareous grassland that is found elsewhere in the survey area, however to the north of this compartment, more calcareous species are present. Species include: Barren Brome, False Brome, Soft Brome, Dropwort, Cut-leaved Crane's-bill, Dove's-foot Crane's-bill, Herb-Robert, Horseshoe Vetch, Yorkshire-fog, Ribwort Plantain, Annual Meadow-grass, Smooth Meadow-grass, Creeping Cinquefoil, Yellow-rattle sp., Bramble, Dandelion and Bread Wheat. Within Banstead Downs SSSI.	Poor	No

Habitat and code	Compartment number	Description	Condition ²	HPI ³
g3c: other neutral grassland secondary code: 10 (scattered scrub), 11 (scattered trees), 16 (tall herb)	1.10	Neutral grassland, with mown paths interspersed through taller sward. Arisings left in situ. There is a stand of invasive, non-native Japanese Knotweed. The arisings left in situ could be artificially increasing the nutrient load resulting in a more neutral grassland for the calcareous substrate of the area. More than 5% bare ground is present in the shorter sward. Species include: Yarrow, Ground-Elder, Cow Parsley, False Oat-grass, Hedge Bindweed, Common Knapweed, Creeping Thistle, Hawthorn, Cock's-foot, Cleavers, Cut-leaved Crane's-bill, Wood Avens, Meadow Oat-grass, Hogweed, White dead-nettle, Meadow Vetchling, Perennial Rye-grass, Redshank, Annual Meadow-grass, Rough Meadow-grass, Bracken, Creeping Buttercup, Japanese Knotweed, Bramble, Curled Dock, Broad-leaved Dock, Russian Comfrey, Dandelion, White Clover, Common Nettle and Common Vetch.	Moderate	No
g4: modified grassland secondary code: 16 (tall herb)	1.11	A large, tall nettle stand intermingled with occasional other ruderal and scrub species such as Cleavers, Hogweed and Broad-leaved Dock, indicating an area which has high nutrient load compared to that more typical of the neighbouring calcareous grassland. The presence of these tall ruderal species may be due to a localised change in the soil, but the cause is not readily observable. Species include: Cleavers, Hogweed, Bramble, Broad-leaved Dock and Common Nettle. Within 'Areas Adjacent to Banstead Downs SSSI' SNCI.	Moderate	No
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native)	2.1	A small parcel of HPI woodland north of Highdown Road. Where it bounds the road it has been managed to form a very dense screen with a tall grassy and ruderal verge, and dense scrub alongside larger and more mature leafy trees. A very mixed woodland with several woody species forming the canopy in particular Pedunculate Oak and Sycamore. There are several mature trees, and it is likely that these are future veteran trees. A small grassy and scrubby clearing is present. Shaded rides form along the various footpaths, and there is cut and piled brash in some locations, as well as more naturally distributed scattered fallen dead wood. Standing dead wood is also present across the parcel. The interior is blanketed in Common Ivy, and there is a healthy and complex shrub layer. The interior varies between being dark and shaded, and having dappled light through the canopy where a more varied understorey can grow. The more easterly section has a higher influence of Sycamore and Norway Maple. While these persist to the west, the woodland becomes more mixed with an increased influence from Pedunculate Oak. However Sycamore and Norway Maple are fast growing and proliferate, and may begin to over dominate over time, without appropriate management. Evidence of past coppice of Hazel. There is evidence of Ash die-back. Additionally, Horse-chestnut is likely to be impacted by the Horse-chestnut Leaf Miner. A stand of invasive non-native Variegated Yellow Archangel was recorded, and non-native Cherry Laurel was occasionally present. Historical aerial photography indicates that this woodland has been at least partially present to some degree since 1945. Species include: Norway Maple, Sycamore, Ground-Elder, Horse-chestnut, Agrimony, Barren Brome, Columbine, False Brome, Upright Brome, Soft Brome, non-native Butterfly-bush, Wild Cherry, Rosebay Willowherb, Dogwood, Hazel, Hawthorn, Smooth Hawk's-beard, Cock's-foot, Black Bryony, Male Fern, Beech, Lesser Celandine, Ash, Cleavers, Herb-Robert, Wood Avens, Common Ivy, Hogweed, invasive non-native hybrid Bluebell, Common Cat's-ear, Holly, invasive non-native Variegated Yellow Archangel, White dead-nettle, Meadow Vetchling, Wild Privet, Honeysuckle, Wild Marjoram, Ribwort Plantain, Rough Meadow-grass, Creeping Cinquefoil, Cowslip, non-native Cherry Laurel, Blackthorn, Pedunculate Oak, Bulbous Buttercup, Dog Rose, Bramble, Wood Dock, Goat/Grey Willow, Elder, Rowan, invasive non-native Snowberry/Coralberry, Dandelion, Yew, White Clover, Gorse, Common Nettle, Wood Speedwell and Common Vetch. Within 'Areas Adjacent to Banstead Downs SSSI' SNCI.	Moderate	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native)	2.2	Similar to the western half of 2.1, with canopy formed mainly by Pedunculate Oak and Sycamore over a varied shrub layer. Grassy verges, rides and glades are all present. Where the canopy is dense, the understorey is well-shaded and comprises mainly Bramble. The interior here gets very dark and damp. There are additionally areas where there has been past coppicing of Hazel. Screened from the road in a similar manner to 2.1. Non-native species are present in small amounts, including Wilson's Honeysuckle, Snowberry/Coralberry, hybrid Bluebell and a non-native Iris. Species include: Field Maple, Norway Maple, Sycamore, Ground-Elder, Horse-chestnut, Barren Brome, Lords-and-ladies, Silver Birch, False Brome, Upright Brome, Soft Brome, Common Knapweed, Creeping Thistle, Traveller's-joy, Dogwood, Hazel, Hawthorn, Ivy-leaved Toadflax, Cock's-foot, Black Bryony, Beech, Ash, Cleavers, Cut-leaved Crane's-bill, Hedgerow Crane's-bill, Herb-Robert, Wood Avens, Common Ivy, Hogweed, hybrid Bluebell, Holly, White dead-nettle, Dog's Mercury, Wild Marjoram, Green Alkanet, Salad Burnet, Cherry Laurel, Pedunculate Oak, Creeping Buttercup, Bramble, Goat/Grey Willow, Elder, Snowberry/Coralberry, Dandelion and Yew. Within 'Areas Adjacent to Banstead Downs SSSI' SNCI.	Moderate	Yes

Habitat and code	Compartment number	Description	Condition ²	HPI ³
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native), 49 (veteran trees)	2.3	<p>Very similar to 2.1 and 2.2, however a much larger woodland parcel. Very mixed and complex structure, with some very dense areas and some more open areas. Fallen and standing dead wood is abundant. Regeneration is evident with seedlings and saplings. Where it bounds 1.8, it forms a Common Nettle and ruderal/scrub ecotone under the woodland canopy edge. Grassy rides are present, which support butterflies such as Speckled Wood, observed on the wing during the survey. The rides and glades make a dynamic landscape with the adjacent grassland habitats. Old mature Oak with veteran features are present. The area south off Common Field Road has a ride by the footpath and houses that is neutral in character. The woodland looks younger in this area and has some dense scrubby areas where it is still maturing. Bare ground footpaths and bridleways pass through the woodland, revealing a chalky soil substrate. Furthest to the south, becomes older, more damp and denser, although few bryophytes are present, with more ferns and a closed canopy. However, semi-mature and young trees still outnumber the mature trees. Tends to be younger and scrubbier closer to the railway boundary. A dried-up stream/ditch passes through the lower area, with a chalky substrate, originating from a culvert to the southwest. The understorey structure varies across this large woodland compartment: in some areas it is more open, with a diverse ground flora, other areas have more dense understorey shrubs with multiple storeys, other areas still are very densely shaded by the canopy and support Common Ivy or simply bare ground. A good number of ancient woodland indicator species (8 species) are present.</p> <p>Species include: Norway Maple, Sycamore, Horse-chestnut, Agrimony, Garlic Mustard, Ramsons, Barren Brome, Cow Parsley, Lords-and-ladies, Hart's-tongue, Silver Birch, False Brome, Hedge Bindweed, Traveller's-joy, Dogwood, Hazel, Hawthorn, Cock's-foot, Male Fern, Spindle, Hemp-Agrimony, Beech, Wild Strawberry, Ash, Cleavers, Herb-Robert, Wood Avens, Ground-ivy, Common Ivy, Hogweed, hybrid Bluebell, Holly, Prickly Lettuce, Wild Privet, Honeysuckle, Dog's Mercury, Greater Plantain, Rough Meadow-grass, Wild Cherry, Cherry Laurel, non-native Portugal Laurel, Blackthorn, Pedunculate Oak, Creeping Buttercup, Field Rose, Dog Rose, Bramble, Broad-leaved Dock, Wood Dock, Goat/Grey Willow, Elder, Sanicle, Red Campion, Rowan, Hedge Woundwort, Dandelion, Yew, Common Nettle, Germander Speedwell, Wood Speedwell and Wayfaring-tree.</p> <p>Predominantly within Banstead Downs SSSI, with a small area extending to the south that falls just outside of the SSSI boundary.</p>	Moderate	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native), 49 (veteran trees)	2.4	<p>Very similar to 2.3, with dense areas in combination with open rides and glades. Large mature Oaks showing veteran features rise above the canopy in places. Historical imagery indicates that this compartment is slightly younger than 2.3, which has evidence of woodland trees dating prior to 1945, whereas in 1945 the location of 2.4 was grassland. The species composition is primarily the same however, and it indicates generation through succession of other woodland in the survey area over time, and continued regeneration is evident in the presence of saplings and seedlings. Deadwood is abundant. 'Blue' butterflies (family: Lyconidae) and various bees observed flying along the more open ride areas, which support grassland species in combination with the woodland species. Hawthorn growth present, showing signs of regrowth from management (thinning/cutting).</p> <p>During the survey, members of the public were observed within the woodland using a disposable barbeque.</p> <p>Species include: Norway Maple, Sycamore, Wild Cherry, Hazel, Hawthorn, Male Fern, Dropwort, Lady's Bedstraw, Horseshoe Vetch, Holly, Oxeye Daisy, Honeysuckle, non-native Cherry Laurel, Pedunculate Oak, Dog Rose, non-native Snowberry/Coralberry, Yew, Gorse, Wood Speedwell and Wayfaring-tree.</p> <p>Predominantly within Banstead Downs SSSI, with a small contiguous area to the north falling just outside the SSSI boundary.</p>	Moderate	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native)	2.5	<p>A small parcel of woodland separated from other parcels on site by major roads. Otherwise a similar composition and structure to the larger parcels. A number of mature trees are present. Bounded by a narrow grassy verge on National Highways land. The parcel has a dense understorey, mainly Sycamore and oak with a Hawthorn understorey. Ground flora is limited due to shading, but mainly ivy and leaf litter. Evidence of previous Hawthorn management.</p> <p>Species include: Field Maple, Norway Maple, Sycamore, Barren Brome, False Oat-grass, False Brome, Upright Brome, Traveller's-joy, Dogwood, Hazel, Hawthorn, Cock's-foot, Spindle, Beech, Ash, Wood Avens, Common Ivy, Hogweed, hawkweed, Holly, Honeysuckle, Common Bird's-foot-trefoil, Cherry Laurel, Blackthorn, Pedunculate Oak, Creeping Buttercup, Dog Rose, Bramble, Goat Willow, Elder, Hedge Woundwort, Dandelion, Yew, Red Clover, Gorse and Wayfaring-tree.</p> <p>Within 'Areas Adjacent to Banstead Downs SSSI' SNCI.</p>	Moderate	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native)	2.6	<p>Very similar to 2.5 in composition and structure, but is bisected by a hard standing public right of way.</p> <p>Species include: Norway Maple, Sycamore, Horse-chestnut, Garlic Mustard, Cow Parsley, Daisy, False Brome, Soft Brome, Shepherd's-purse, Traveller's-joy, Dogwood, Hazel, Willow Cotoneaster c.f., Hawthorn, Cock's-foot, Black Bryony, Beech, Ash, Cleavers, Dove's-foot Crane's-bill, Wood Avens, Common Ivy, Hogweed, Wall Barley, invasive non-native hybrid Bluebell, Perforate St John's-wort, Holly, Perennial Rye-grass, Honeysuckle, Common Poppy, Ribwort Plantain, Meadow-grass sp., Wild Cherry, Pedunculate Oak, Bramble, Goat/Grey Willow, non-native Snowberry/Coralberry, Dandelion, Goat's-beard, Common Nettle and Wayfaring-tree.</p>	Moderate	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native)	2.7	<p>Similar to 2.5 and 2.6, but spanning a larger area, with more mature trees and a more typical ground flora for lowland mixed deciduous woodland.</p> <p>Species include: Norway Maple, Sycamore, Yarrow, Horse-chestnut, Garlic Mustard, Barren Brome, Cow Parsley, Daisy, False Brome, Creeping Thistle, Traveller's-joy, Hazel, Hollyberry Cotoneaster c.f., Hawthorn, Male Fern, Beech, Wild Strawberry, Ash, Cleavers, Dove's-foot Crane's-bill, Herb-Robert, Wood Avens, Ground-ivy, Common Ivy, Hogweed, Yorkshire-fog, Holly, Wild Privet, Perennial Rye-grass, Honeysuckle, Dog's Mercury, Wild Cherry, Cherry Laurel, Blackthorn, Pedunculate Oak, Red Oak, Creeping Buttercup, Field Rose, Bramble, Elder, Snowberry/Coralberry, Dandelion, Yew, Common Nettle and Wood Speedwell.</p>	Moderate	Yes

Habitat and code	Compartment number	Description	Condition ²	HPI ³
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native), 49 (veteran trees)	2.8	Woodland to east of golf course, similar to the other compartments in the survey area. contains some very tall oaks. Complex and varied with standing and fallen deadwood. Lichens are frequent. Motorbike jumps have been built into the woodland (without permission). Species include: Norway Maple, Sycamore, Horse-chestnut, Silver Birch, Butterfly-bush, Dogwood, Willow Cotoneaster c.f., Hawthorn, Black Bryony, Male Fern, Spindle, Ash, Wood Avens, Common Ivy, Holly, Honeysuckle, Wild Cherry, Pedunculate Oak, Field Rose, Dog Rose, Bramble, Goat Willow, Elder, Common Nettle, Wood Speedwell and Wayfaring-tree. Within Banstead Downs SSSI.	Good	Yes
w1f: lowland mixed deciduous woodland secondary code: 37 (semi-natural woodland), 47 (native), 49 (veteran trees)	2.9-2.10	Two parcels of woodland at the southwest of the golf course and atop the hill west of the A217 (Gally Hills), under management by Banstead Conservators. Dense and dark but with a varied ground flora. Cherry Laurel has encroached within these parcels. Trees with veteran features are present in 2.9. Species include: Field Maple, Norway Maple, Sycamore, Ground-Elder, Horse-chestnut, Garlic Mustard, Barren Brome, Cow Parsley, False Brome, Traveller's-joy, Dogwood, Hazel, Hawthorn, Black Bryony, Spindle, Beech, Meadowsweet, Ash, Cleavers, Herb-Robert, Wood Avens, Common Ivy, Holly, White dead-nettle, Wild Privet, Wild Cherry, Cherry Laurel, Blackthorn, Pedunculate Oak, Creeping Buttercup, Bramble, Elder, Sanicle, Dandelion, Yew, Common Nettle, Germander Speedwell and Wayfaring-tree. Within Banstead Downs SSSI.	Moderate	Yes
h3d: Bramble scrub	3.1	A dense swathe of Bramble scrub dividing 1.8 and 1.9, with Common Nettle and Ramsons. Within Banstead Downs SSSI.	Poor	No
h3h: mixed scrub Secondary code: 11 (scattered trees)	3.2-3.6	Several islands of dense mixed scrub with a few scattered trees. A mixture of age classes are present, including mature and semi-mature shrubs with some young/seedlings. There are clearings within the larger islands, and rides between the islands creating ecotone habitats with the grassland 1.2. Species include: Sycamore, Silver Birch, Common Knapweed, Dogwood, Hazel, Hawthorn, Bindweed, Hemp-Agrimony, Blackthorn, Pedunculate Oak, Field Rose, Bramble, Small Scabious, Gorse and Wayfaring-tree. Within Banstead Downs SSSI.	Good	No
h3h: mixed scrub Secondary code: 11 (scattered trees)	3.7-3.8	Smaller area of mixed scrub, similar to 3.2-3.6, however forms more uniform clumps of similar aged scrub and shrub. However, still retains rides and glades with sheltered edges. Species include: Sycamore, Dogwood, Hawthorn, Blackthorn, Pedunculate Oak and Bramble. Within Banstead Downs SSSI.	Good	No
h3h: mixed scrub Secondary code: 11 (scattered trees)	3.9	An area of mature scrub with clearings and glades, manly comprising mature scrub with some seedlings but lacking in a mid-age group. Species include: Sycamore, Ground-Elder, Barren Brome, Dogwood, Hawthorn, Ash, Crosswort, Common Ivy, Honeysuckle, Blackthorn, Bramble and Common Nettle. Within Banstead Downs SSSI.	Moderate	No
Rural trees Secondary code: 1171 (mature trees)	T1-T71	A large number of individual rural trees are present across the grassland habitats within Banstead Downs, including a number within Banstead Downs SSSI (T1-T8, T16-18, T23-T71) and 'Areas Adjacent to Banstead Downs SSSI' SNCI (T10-T15). All are in good condition. These include: Silver Birch, Pedunculate Oak, Sycamore, Ash, Hawthorn, Scots pine and Yew, with Pedunculate Oak being the most frequent, followed by Silver Birch.	Good	No

6.13 Species

Below is a summary of known species information for the site gathered from past surveys and other documents relating to the site. It includes the results of the data search (SBIC, 2023) which lists protected species and species of conservation concern recorded within 1km of the site. The full results of the data search are presented in Appendix 7.

Fauna

Invertebrates

Lowland calcareous grassland is an important habitat for invertebrates due to its ability to support a wide variety of different species across its nutrient-poor soils. Combined with a mosaic of habitats such as scrub and woodland, numerous microclimates are created which further increase the ability of Banstead Downs to support a wide invertebrate assemblage.

Thirty protected invertebrates and those of conservation concern recorded within Banstead Downs were returned with the data search. This includes a large number of species on national Red Lists, as well as those of conservation concern within Surrey. Of note are the following species protected on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended):

- Small Blue (Section 9.5a).
- Roman Snail (Sections 9.1(killing/injuring/taking), 9.2, 9.5a).
- Chalk Hill Blue (Section 9.5a).
- White-letter Hairstreak (Section 9.5a).
- Brown Hairstreak (Section 9.5a).

Seven of these species are Species of Principal Importance (SPI):

- Grey Dagger
- Small Heath
- Small Blue.
- Dingy Skipper
- Grizzled Skipper
- White-letter Hairstreak.
- Brown Hairstreak.

The following invertebrates were recorded incidentally during the survey (casual sightings rather than specifically surveyed for):

- White/Buff-tailed Bumblebee
- Common Carder Bee
- Small Blue.
- Common Blue
- Red Admiral
- Brimstone
- Speckled Wood
- Labyrinth Spider
- Cinnabar
- *Liposthenes glechomae* (a gall wasp on Ground-ivy).

- Spittlebugs (indet.).
- Several dragonflies on the wing.

Cinnabar is a Species of Principal Importance (SPI). This is a common species and while it was not returned in the data search, it is likely that a population has been consistently present within the survey area.

The Lepidoptera assemblage is a prime example of the importance of lowland calcareous grassland for invertebrates, and Banstead Downs is the site of Surrey's longest running butterfly transect (data collected since 2000). Of the 33 butterfly species recorded during these transects, notable species recorded not mentioned above include:

- Dark Green fritillary (Butterfly Conservation priority Medium).
- White Admiral (SPI).

Glow-worm is also known to be present on site.

An additional 21 protected invertebrates/those of conservation concern were recorded within 1km of the survey area, including stag beetle which is also protected under Schedule 5 Section 9.5a of the Wildlife and Countryside Act 1981 (as amended) as well as seven additional SPI.

Amphibians

Banstead downs supports two waterbodies discussed in Section 6.12, which could support amphibians, although WB2 was dry at the time of survey.

Terrestrial amphibian habitat also exists within woodland and dense scrub, as well as longer tussocky grassland.

No amphibian records within Banstead Downs were returned in the desk study, nor recorded during the habitat survey, however SARG may hold additional records.

Four amphibians have been recorded within 1km of Banstead Downs, they are:

- Common Toad (SPI and on Red List).
- Smooth Newt
- Common Frog
- Great Crested Newt (SPI).

Great Crested Newt is protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2019 (as amended) and Sch 5 Sections 9.4b-c and 9.5a of the Wildlife and Countryside Act 1981 (as amended).

Reptiles

Suitable reptile habitat exists across Banstead Downs across almost all habitats, including grassland, scrub and woodland edge. Natural refugia and refugia generated through both management practices and activities from members of the public (e.g. wood piles, rubble piles) generate additional habitat for reptiles.

No reptiles records within Banstead Downs were returned in the desk study, nor recorded during the survey, however SARG may hold additional records. Given the size of the survey area, and the mosaic of suitable habitats, common reptile species (Slow-worm, Grass Snake, Common Lizard) are likely present.

Two reptiles have been recorded within 1km of Banstead Downs:

- Grass Snake.
- Common Lizard.

Birds

The site supports suitable breeding bird habitat within woodland, scattered trees, dense scrub, scattered scrub and longer grassland.

Twelve bird species recorded within Banstead Downs were returned with the data search, all of which are Amber or Red BoCC. Five are Red List, one (House Sparrow) is a SPI, and two are Critically Endangered species, which are also protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended):

- Redwing (Breeding population critically endangered in Great Britain).
- Fieldfare (Breeding population critically endangered and possibly extinct in England).

Yellowhammer has also been recorded during the SSSI unit condition surveys, also a Red BoCC and a SPI.

Further to this, the following birds were recorded during the survey:

- Magpie
- Chiffchaff
- Skylark (SPI, Red BoCC).
- Carrion Crow
- Great Tit
- Wood Pigeon (Amber BoCC).
- Song Thrush (Amber BoCC).

In addition, the data search returned records of 30 further notable bird species within 1km of Banstead Downs. These include Red List and BoCC species, most notably six SPI and two Schedule 1 species:

- Skylark (SPI, Red BoCC) – not previously recorded in Banstead Downs, but recorded during 2023 survey.
- Tree Pipit (SPI, Red BoCC).
- Cuckoo (SPI, Red BoCC, breeding population vulnerable in GB).
- Yellowhammer (SPI, Red BoCC) – not previously formally recorded in Banstead Downs, but noted during 2013 SSSI unit condition surveys.
- Hobby (Schedule 1 Part 1).
- Common Crossbill (Schedule 1 Part 1).
- Lapwing (SPI, Red BoCC, breeding population endangered and non-breeding population vulnerable in GB).

Surrey Bird Club may hold additional records of protected birds and those of conservation concern within the site.

Mammals

Badger

The desk study does not include Badger records and the local Badger group (East Surrey Badger Group) was not consulted as part of the desk study. Historical records could therefore be held by the local Badger group.

Signs of Badger activity were not recorded during the survey, however suitable Badger habitat is prevalent across the entirety of Banstead Downs.

Bats

All habitats recorded in Banstead Downs can be used by bats for foraging and commuting. Suitable roosting habitat is also prevalent across the woodland and individual scattered trees, particularly those mature trees developing veteran features (or those that may already qualify as veteran). Details of these are provided in Table 6.

Table 6: Habitats in the survey area suitable for use by bats

Habitat	Suitable use for bats
Lowland calcareous grassland	Foraging
Other neutral grassland	Foraging
Modified grassland (tall ruderal)	Foraging and commuting
Lowland mixed deciduous woodland	Roosting, foraging and commuting
Mixed scrub	Foraging
Individual trees	Roosting, foraging and commuting

The desk study returned records of the following bat species within Banstead Downs:

- Common Pipistrelle

However, it should be noted that bats are known to commute several kilometres from their roost locations, and so bat records within 1km of the site could also correspond to individuals using Banstead Downs. The data search returned eight additional bat species within 1km of the survey area, which could readily use the survey area for foraging, commuting and roosting:

- Indeterminate bat.
- Serotine
- Myotis sp.
- Leisler's
- Noctule
- Pipistrellus sp.
- Nathusius' Pipistrelle
- Brown Long-eared

Noctule and Brown long-eared are SPIs.

Hazel Dormouse

Hazel Dormouse records were not returned within the data search. However, the survey area supports suitable Hazel Dormouse habitat in the form of woodland (and woodland edge bounding tall grassland) and dense scrub.

No signs of Hazel Dormouse activity were recorded during the survey.

Hazel Dormouse is a SPI.

Other mammals

The desk study did not return any records of notable mammals within Banstead Downs. European Rabbit was recorded during the survey, with signs of rabbit prevalent across much of the grassland, including grazing signs, burrows and droppings.

The desk study returned records of two additional notable mammals within 1km of the survey area:

- West European Hedgehog (SPI, vulnerable).
- Polecat (SPI).

Polecat is protected under Schedule 4 of the Conservation of Habitats and Species Regulations 2017 (as amended). This species was previously extinct in Surrey and is recolonising after a historic reintroduction programme. It is now rare.

All habitat within Banstead Downs would readily support both of these species.

Flora and fungi

Rare and notable species

All of the habitats recorded on site have the potential to support rare/notable plant species, particularly the lowland calcareous grassland and lowland mixed deciduous woodland, however the other neutral grassland, mixed scrub and even the modified grassland parcels have potential due to their proximity to the other habitats, and their underlying substrate. The species recorded during the survey is not exhaustive; other species will be present, including more cryptic rare and notable species. This is illustrated by the results of the desk study.

The data search returned 41 records of notable vascular plants within Banstead Downs, with many of these being Red List species, and/or those notable within Surrey. Eight species are SPI, three are protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended), and one is protected under Schedule 5 of the Conservation of Habitats and Species Regulations 2017 (as amended):

- Cornflower (SPI).
- Basil Thyme (SPI).
- Chalk Eyebright (SPI).
- Broad-leaved Cudweed (SPI, Schedule 8).
- Early Gentian (SPI, Schedule 8, Schedule 5).
- Common Juniper (SPI).
- Man Orchid (SPI).
- Greater Yellow-rattle (Schedule 8).

One hundred and eighty-three vascular plants were recorded during the survey. This is typical number given the habitats present and the time of year. A list of vascular plant species recorded within each habitat type and their abundance is provided in Appendix 3. Of these species recorded, notable species include:

- Quaking-grass – Near Threatened (England).
- Wild Strawberry – Near Threatened (England).
- Common Rock-rose – Near Threatened (England).
- Tormentil – Near Threatened (England).
- Greater Yellow-rattle – Schedule 8.
- Sanicle – Near Threatened (England).
- Heath Speedwell – Near Threatened (England).
- Crosswort – Near Threatened (England).

Greater Yellow-rattle is thought to have been accidentally introduced to the site on machinery, rather than as a natural coloniser. The other notable species recorded in the habitats on site are all likely to have colonised naturally and are overall typical species for the habitats present. However, there are several instances of more atypical species: Heath Speedwell and Gorse is more typical of acidic conditions.

A fungal foray undertaken in February 2023 found 65 species of fungi within Banstead Downs, including big blue pinkgill which is a SPI.

The survey was undertaken within the optimal survey season, and rare/notable plant species were recorded as present in the survey area (see list above).

A further 21 notable vascular plant species recorded within 1km of Banstead Downs were returned with the data search. Those which could be supported by the habitats found in Banstead downs include:

- White Helleborine (SPI).
- Bluebell (Schedule 8).
- Early Spider-orchid (Schedule 8).

Invasive and non-native species

The following species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) recorded within Banstead Downs were returned with the data search:

- Three-cornered Garlic
- Himalayan Cotoneaster
- Montbretia
- Variegated Yellow Archangel
- Ring-necked Parakeet
- Japanese Knotweed
- Eastern Grey Squirrel

Additionally, the following Schedule 9 species were recorded during the survey (invasive plant species were recorded as target notes, see Table 7 and Figure 1):

- Hollyberry Cotoneaster
- Variegated Yellow Archangel.

- Japanese Knotweed.
- Eastern Grey Squirrel.
- A Cotoneaster species.

Furthermore, the following species that are not listed on Schedule 9 but which are known to be non-native invasive species were recorded:

- Cherry Laurel.
- Portugal Laurel
- Willow-leaved Cotoneaster c.f.
- Butterfly-bush
- Hybrid Bluebell
- Wilson's Honeysuckle

Canadian Goldenrod was recorded during the SSSI unit condition surveys.

Target notes

Details of target notes recorded during the survey are presented in the table below.

Table 7: Target notes

Target note	Description
1	Fly-tipping on edge of 2.1.
2	Small mammal burrows within 2.1.
3	Large, localised stand of Variegated Yellow Archangel.
4	A small stand of non-native Wilson's Honeysuckle.
5	Localised Sweet-vernal Grass and Fescue sp. with more exposed bare ground and mosses.
6	Rubble pile.
7	Unidentified Cotoneaster, potentially a Schedule 9 species but not identified to species level.
8	Dried out stream/ditch with chalky substrate.
9	Small pocket of neutral grassland surrounded by woodland 2.6 and the neighbouring pavement.
10	Hollyberry Cotoneaster – several shrubs observed in the vicinity of this point.
11	Japanese Knotweed – new growth appearing in the recently mown path next to the slightly older growth in the tall grass.
12	Second stand of Japanese Knotweed, more scattered across the tall grassland.

7 Management plan features

Based on the assessment above, the following ecological features have been selected as the focus of this management plan.

- Feature 1: Grassland and scrub mosaic
- Feature 2: Woodland

7.1 Feature 1 – Grassland and scrub mosaic

Assessment of significance

The lowland calcareous grassland is of national importance, as it is a HPI and a key reason for both the SSSI and SNCI designations that cover the northern half of Banstead Downs. The mixed scrub habitat is an important part of a dynamic habitat mosaic with this calcareous grassland. The scrub habitat becomes more problematic when it is over a threshold of 30-40% area coverage, where it begins to act as an invasive on the calcareous grassland. Without management intervention, the scrub habitat will naturally tend to increase in area over time.

The grassland and scrub together support notable and protected species including number of birds, invertebrates and vascular plants protected under Schedules 1, 5 and 8 respectively.

The other neutral grassland habitats are of local importance in their current state, however considering the base substrate and previous land use, these are highly likely to be areas of degraded calcareous grassland that could be restored as a long-term aim, which would make them much more significant.

The small strip of modified grassland within the SNCI, supporting dense tall ruderal growth, is of site importance; this is a typically commonplace type of habitat, however in this small area it does provide opportunity to support a different assemblage of invertebrate species compared to the rest of the habitats within Banstead Downs, particularly Vanessa butterflies (the group of butterflies that includes Red Admiral, Peacock, and Small Tortoiseshell). It also provides important screening of the SNCI grassland from the busy road and may protect this grassland from damaging activities such as fly-tipping, which was observed along the road. As for scrub above, it could encroach into the grassland without suitable management intervention.

Objective

The primary objective for the calcareous grassland and scrub mosaic within Banstead Downs is to meet the thresholds detailed within the HLS agreement, namely:

- The current area of calcareous grassland scrub mosaic on the site will be maintained.
- The SSSI units will be in favourable condition.
- Where they fall within the HLS agreement, the habitats will meet the thresholds detailed within this agreement.

Additional aims include:

- Eliminate invasive non-native species, particularly from within the SSSI and SNCI grassland (namely Canadian Goldenrod), but also as a long-term aim, eliminate the

Japanese Knotweed from compartment 1.10. At minimum, the spread of the Japanese Knotweed to other compartments within Banstead Downs to be prevented.

A long-term objective would be to enhance the condition of all calcareous grassland parcels to good condition according to the BNG Metric 4.0 criteria (Natural England, 2023b), however the thresholds to achieve this go beyond the requirements of the HLS agreement. There is no short or medium term aim to generate biodiversity unit uplift from the grassland and scrub within Banstead Downs. This long-term objective is therefore not included in the Works Schedule or Monitoring Schedule for this iteration of the management plan, however it may be feasible to incorporate it into future iterations.

Threats to habitat and associated species

Public access

The fact that members of the public can freely access the grassland and scrub mosaic within Banstead Downs introduces a number of threats to the habitat and associated species:

- **Dogs:** Banstead Downs is popular with dog walkers, including commercial dog walkers. As such, large numbers of dogs pass through the area daily. This can result in large amounts of dog fouling which is not always removed. This introduces nutrients into the substrate, which can allow for more vigorous grasses to rapidly grow and outcompete calcareous specialist species. It also impacts on the success of cut and collect as it can contaminate hay cut collections making them unusable. This is already apparent with the presence of small pockets of Perennial Rye-grass patches close to paths and at bottlenecks. Additionally, dog fouling can damage the invertebrate population through the introduction of imidacloprid and fipronil which passes into dog waste after an animal is treated for fleas, ticks and worms. These chemicals are neonicotinoids and can result in the death of any invertebrates which make contact. Another threat introduced by large numbers of dogs is the disturbance to ground nesting birds, particularly where dogs are not kept on leads. Dogs can also trample and dig up grassland plants. When livestock are grazing, dogs that are not controlled by their owner can harass the livestock, and this can result in injury to the livestock, or in some instances death.
- **Antisocial behaviour:** Another consequence of Banstead Downs being public access is the inevitable presence of antisocial behaviour. In a general sense, this can result in littering which can pollute the habitat and kill or injure fauna such as small mammals, birds and reptiles. Members of the public having barbeques, or generally lighting fires, introduces nutrients into the soil through the Ash, but also increases the risk of wildfire across parched grassland in times of drought/heatwaves. The sensitive grassland habitats are already damaged and at risk of further damage by mountain bikers and dirt bikers, which use areas of the grassland as bike routes. This has resulted in the terrain of some areas being artificially altered to create hazards and jumps for the bike routes. It also introduces pollution into the grassland via exhaust fumes and oil. And finally, the regular driving of bikes, in particular dirt bikes, puts fauna at risk of killing and injury, in particular young animals, and ground-nesting birds. The bike courses in Banstead Downs are not permitted and are an illegal activity.
- **Equestrian activity:** There are bridleways within Banstead Downs and the threats to the grassland habitat is minimal. However, threats increase where riders take horses directly over grassland. This can result in manure introducing nutrients into the soil, trampling of the flora, and disturbance/killing/injury to fauna, in particular ground-nesting birds.

- **Nutrient enrichment:** Calcareous grassland is particularly sensitive to nutrient enrichment, as the typical calcareous sward has evolved to rely on extremely nutrient-poor calcareous substrate. Nutrients can enter the soil as described above, and also through inappropriate management such as mowing without collecting arisings or application of fertiliser. Where soil becomes more nutrient rich, vigorous grasses and forbs will establish, which can additionally spread over the wider area and outcompete the calcareous species. Many of these species, once established, can be difficult to remove without intensive management.
- **Loss of key indicator species:** Many of the threats detailed here can result in the loss of key indicator species, or notable flora/fauna that is present in Banstead Downs but in low numbers. An example is Early Gentian. If conditions are such that a specialist species cannot be supported (e.g. outcompeted by more generalist species, loss of a food plant) the species may not be able to maintain a population in the area. Once this population is lost, it can be very difficult to return without human intervention, particularly if the population was originally isolated from other populations in the area.
- **Invasive non-native species:** Invasive non-native species, and invasive native species such as tor-grass, can outcompete native specialist calcareous species. Tor-grass was not recorded in the 2023 habitat surveys, however it has been recorded historically and could reappear if the site is not managed sensitively. Invasive species are typically very hard to contain once established, as many of these species have been classified as invasive due to ease of spread via seed or rhizomes. Examples include Japanese Knotweed, Cherry Laurel, various Cotoneasters and Canadian Goldenrod.
- **Over-encroachment of scrub and woodland:** Without maintenance, the grassland will naturally succeed to transitional scrub and ultimately woodland. This had previously been a problem for Banstead Downs, with a large amount of scrub across the grasslands of the SSSI. Where there is an over-encroachment of scrub, the calcareous grassland species will not be able to grow due to being shaded out, and eventually trees will establish and the area would transition to woodland.
- **Over-grazing:** Grazing inappropriately, such as for too long a period, over too large an area, at the wrong time of year, can result in a short, uniform sward, which results in fewer microhabitats for invertebrates, inability for plants to successfully set seed, poaching of the soil, excessive introduction of nutrients through dung etc. If livestock are treated with neonicotinoid de-wormers, as discussed for dogs above, this could result in death of invertebrates using the grassland.
- **Under-grazing:** Under-grazing of a sward will result in the build-up of dead plant litter which will result in the shading out of smaller species. It will also result in scrub over-encroachment where this is not grazed back.
- **Climate change:** Lowland calcareous grassland is considered to have low climate change sensitivity (Natural England and the RSPB, 2020), with the ability to resist impacts from climate change being proportional to age of grassland and unimproved nature. The main risks from climate change are an increased risk of fire damage caused by wildfire due to drier conditions in times of drought, and a loss of shallow-rooted species which are less resilient to surviving drought conditions. Any fungi and bryophytes present may also decline. Wetter winters could also encourage a higher amount of grasses compared to forbs. Wetter winters could also destabilise the soil more, and result in winter grazing being more damaging to the sward.

Management measures and rationale

Grassland and scrub under the HLS agreement

All of the lowland calcareous grassland within Banstead Downs, as well as the two neutral parcels 1.8 and 1.9, are under the HLS agreement.

Manage the sward by grazing and/or cut and collect in combination to achieve an average sward height of between 2cm and 10cm in October/November. Grazing should commence from September and continue on rotation across the winter until the end of December. The length of grazing period should be adapted depending on the weather conditions – grazing must be avoided if the soil is waterlogged following heavy rains, as the livestock will more readily poach the soil. Avoid grazing at all between May to late August. Cut and collect can be undertaken following grazing, or instead of grazing, depending on access to the compartment and available resourcing. The aim is to allow for taller tussock of 15-30cm tall up to ~20-30% of the grassland area.

Within each compartment, an area should be set aside that should not be grazed or cut back that year. This provides taller tussocky grassland with retained seed heads. This not only increases the ability for plants to set seed, but also retains important invertebrate habitat – many insect species will over-winter within plant stems as larvae or pupae. Over time, rotating this retained area will result in a complex sward.

Each grazing cycle, a timetable for grazing rotation should be created, varying the compartment order each year to ensure that there is always variety in timings. This will further add complexity to the sward. As different species will set seeds earlier or later in the season, this varying of grazing order will reduce the strain of different species and their ability within individual compartments. Grazing areas can be sectioned off by using temporary electric fencing. During any grazing period, this must be regularly monitored, not only to monitor the health and wellbeing of the livestock, but also to ensure that the soil is not becoming overly poached – a particular risk of winter grazing due to damper soil conditions. If any poaching is becoming evident, the livestock should be moved to a new area.

Sheep or cattle grazing is appropriate – sheep are the current livestock used at Banstead Downs and cattle grazing is not being considered. Supplementary feeding should not be carried out.

If over-stocked, sheep tend to graze very close to the ground resulting in a very short, even sward. Additionally, sheep will graze flowering buds and if set to pasture at the wrong time of year, can inhibit the spread of desirable flowering species. They may also avoid grazing tussocks and litter, and are less effective at browsing woody vegetation. Their smaller size and weight can reduce the impact of poaching, which is an important consideration when winter grazing, where the soil is more vulnerable to this. They are also adept at grazing on slopes (Kent Wildlife Trust, Undated).

When selecting a grazing density, consideration should be made to the fact that the grassland receives additional grazing pressure from a rabbit population, and deer grazing is also likely as Roe Deer is a common species in Surrey and there is optimal habitat within Banstead Downs.

Sheep should be grazed at a density of 2.5 sheep/ha/year (Ashwood, 2014). Stocking density should not exceed more than 0.75 LSU/ha/a, considering the following livestock units (Kent Wildlife Trust, Undated):

- 1x sheep/goat (including breeding ewes with lambs): 0.15 LSU.

When mowing, cut in an irregular pattern at different heights to maintain diversity across the sward. Unless the terrain prevents it (e.g. compartment 1.7), cut and collect should always be undertaken to ensure that nutrients are not added back to the soil. Arisings must not be piled on the grassland within the HLS agreement – they should be taken elsewhere. In the case of compartment 1.7, an assessment should be made to see whether there are areas of flat terrain that can be accessed by cut and collect machinery, to reduce the impact of leaving arisings in situ as much as possible. If resources allow, some areas could be hand raked following cutting, although this would be a low priority action.

The grassland structure and the invertebrates which use the grassland would benefit from creation of chalk scrapes. Scrapes can be created with a mix of larger bare areas and smaller sections. The small scrapes should be no more than 1m x 1m and a few centimetres deep, this will open the sward and give space for seed germination, however these will grow over within a few years. These small scrapes should be recut every two years. Two larger scrapes should then be created within the grassland this will be 2m x 5m and 20cm deep, ideally with tapered ends to form an oval. Once more than 50% of the scrape area has been grown over by vegetation, new scrapes should be dug in a different area as this will create transitional habitats.

Dense scrub

Dense scrub parcels within the grassland must not exceed 40% of the overall combined area of dense scrub and grassland. The existing parcels present are within the threshold for the HLS agreement, and these should be maintained through grazing, and manual cutting back if grazing does not achieve aims, or livestock are not grazed in that area due to resourcing requirements and rotational timings. The coverage of scrub over all calcareous grassland within the HLS agreement should be reviewed every two years, at the peak of the growing season (mid-summer) to ensure that management measures are retaining the correct threshold. This can be done through a combination of methods – the most simple is viewing publicly available satellite imagery e.g. Google Earth, however this may be unreliable as images may not be taken at the desired period. Drones are a very effective method of rapidly surveying large open habitats. There is a higher upfront cost, however once purchased it is cheaper to run, and can provide accurate imagery of scrub cover at the desired time of year. On ground survey using existing staff or volunteers is another means of determining this, however this is resource heavy and may require more flexible timings.

The dense scrub parcels 3.2-3.9 are in a good condition, with a variety of age classes, numerous native woody species, and shaded clearings/glades. The grazing and cutting back of the scrub should ensure that this structural integrity is not lost. Scrub should be managed as a dynamic habitat, and can travel across the area as older plants die off/are cut back, and younger plants self-set.

Allow scrub and surrounding taller grassland swards to develop by temporarily fencing off small areas of these e.g. around woodland edges, with minimum intervention (i.e. no mowing,

grazing). Vary the area every three years to create a dynamic, changing landscape (Buglife, 2013).

Manual scrub clearance may be required to supplement the grazing effort, e.g. if stock must be removed prior to the desired level of scrub repression being achieved. Any manual scrub clearance should be undertaken in the winter, outside of the breeding bird season (March to August inclusive).

The swathe of tall ruderal vegetation forming compartment 1.11 should be left at its current extent, as it benefits the adjacent calcareous grassland by screening it from the road. The compartment should be prevented from encroaching into the grassland through cut and collect, as per scrub, above.

Protecting the function of the SSSI and SNCI

As the calcareous grassland compartments fall within a SSSI and/or SNCI, there are a number of requirements for managing these areas that must be adhered to, in order to protect the function of these designated habitats. These are summarised as follows:

- No drainage can be installed without agreeing in writing with Natural England.
- Where there are undesirable species present which require control, the method of control must be agreed with Natural England prior to carrying this out.
- When restoring grassland, ploughing, sub-surface cultivation and re-seeding are not permitted. All restoration must be through supporting the existing seedbed.
- Management/operations/stocking must not damage the soil structure or heavily poach the ground, ensuring that bare ground never exceeds 5% across grassland.
- Fertilisers, organic manures, waste materials or other sources of nutrients cannot be applied to the soil.

Grassland outside of the HLS agreement

Compartment 1.10 falls outside of any designated sites, and therefore is not included within the HLS agreement. This compartment comprises other neutral grassland, however due to its location, it is likely that this is degraded calcareous grassland that has received a high nutrient load due to inappropriate management.

Due to resourcing limitations, the management of this compartment is a lower priority. The main aims are therefore to maintain at its current extent and condition, with no additional deterioration, and to ensure that the Japanese Knotweed present does not spread to any additional areas of the site.

The grassland should be cut back once or twice a year. If once a year, this should be in August or September, once flowers have set seed. If twice a year, the initial cut should be in April, prior to the peak growing season. Cut and collect would be ideal for this compartment, however due to resourcing restrictions, cut only is likely to be the most feasible.

Notwithstanding this, arisings in areas where Japanese Knotweed is growing should be carefully collected and disposed of offsite as controlled waste: while the eradication of this highly invasive species is unlikely to be achievable within this compartment with the current resources afforded, it is very important that the risk of its spread is decreased as much as possible. This grassland is publicly accessible, and Japanese Knotweed readily spreads through rhizomes, and if cuttings are left in situ, these could be unwittingly spread by members

of the public, or even BCC staff. Introducing signage alerting members of the public in combination with temporary fencing could be a means of ensuring that rhizomes are not unwittingly tracked following any mowing of the grassland.

Table 8 presents a summary of the management measures.

Table 8: Feature 1 – grassland and scrub mosaic - management measures

Map reference	Action	Timing
Green diamond hatching on Figure 5	Conservation grazing using sheep. Vary order each year. Followed by cut and collect (if required).	September-December Annually
	Monitor temporary electric fencing and degree of poaching within grazed compartments.	
Green square hatching on Figure 5	Cut and collect. Vary order each year (areas with no feasible grazing opportunity).	September-December Annually
Olive green diagonal hatching on Figure 5	Cut only, with raking of arisings where resources allow. Vary timing each year.	September-December Annually
Brown diagonal hatching on Figure 5	Cut only, with raking of arisings where resources allow. Vary timing each year.	August-December Additional April cut (optional) Annually
Blue triangle on Figure 5	Cut and dispose of arisings as controlled waste (Japanese Knotweed stands).	August-December Additional April cut (optional) Annually
1.1-1.9, 3.1-3.9	Manual scrub management where required.	September-February Annually
1.1-1.9, 3.1-3.9	Section off areas of scrub and tall grassland as non-intervention areas and vary these every three years.	April Every 2 years

Targets and KPIs

The targets and KPIs are detailed in Table 9.

Table 9: Feature 1 – grassland and scrub mosaic - targets and KPIs

Target type	Target no.	Target	KPI
SSSI & HLS – HK6	1	All SSSI land should be in favourable or recovering condition.	SSSI unit condition.
SSSI & HLS – HK6	2	The extent of grassland habitat should be maintained or increased.	Habitat extent.
SSSI & HLS – HK6	3	The soil phosphate index should be 0 or 1 where practicable.	Soil phosphate index.

Target type	Target no.	Target	KPI
SSSI & HLS – HK6 & HK7	4	At least two high-value indicator species such as Lady's Bedstraw, Autumn Gentian, Horseshoe Vetch, Bastard-toadflax, Cowslip, Orchid species, Clustered Bellflower, Fairy Flax, Hairy Violet, Kidney Vetch, Milkworts, Salad Burnet, Dropwort, Squinancywort, Wild Thyme, Bee Orchid, Round-headed Rampion should be frequent and two occasional in sward.	Floral diversity and abundance.
SSSI & HLS – HK6	5	Cover of wildflowers in sward (excluding undesirable species but including sedges) should be between 30% and 70%. At least 25% of wild flowers should be flowering between May and July.	Floral diversity and abundance.
SSSI & HLS – HK6	6	Cover of bare ground should be between 1% and 5%, distributed throughout the field in hoof prints or other small patches.	Bare ground extent.
SSSI & HLS – HK6	7	Locally significant species populations should be retained – e.g. Early Gentian, Round-headed Rampion and Bee Orchid.	Floral diversity.
SSSI & HLS – HK6	8	Undesirable species e.g. Creeping Thistle, Spear Thistle, Curled Dock, Broad-leaved Dock, Common Ragwort, Common Nettle cover <2% of area.	Coverage of undesirable species.
SNCI & HLS – HK15	9	Compartment 1.4: From 1 st September to 28 th February at least 10% of the field should have grasses that are allowed to go to seed and with the seed heads left undisturbed.	Percentage of grasses with retained seed heads in autumn/winter.
SNCI & HLS – HK15	10	Compartment 1.4: At least two of the positive indicator species should be occasional: Lady's Bedstraw, Autumn Gentian, Cowslip, Common Bird's-foot-trefoil, Carlina Thistle, Common Rock-rose, Fairy Flax, Hairy Violet, Harebell, Milkworts, Salad Burnet or Wild Thyme, Quaking-grass, Glaucous Sedge, Common Cat's-ear.	Abundance of listed indicator species.
SNCI & HLS – HK15	11	Compartment 1.4: by year 2 of HLS agreement, cover of indicators of water logging (Tufted Hair-grass, rushes, large sedges, large grasses) should be <30%.	Percentage coverage of indicators of water logging.

Target type	Target no.	Target	KPI
SNCI & HLS – HK15	12	Compartment 1.4: populations of nationally rare/nationally scarce/locally significant species (e.g. Early Gentian) should be maintained.	Abundance of notable species.
SNCI & HLS – HK15	13	Compartment 1.4: by year 3 of HLS agreement, at least two high-value indicator species (see target number 4) should be frequent and two occasional in the sward.	Abundance of indicator species.
INNS	14	The extent of Japanese Knotweed to be no greater than current (i.e. extent recorded in 2023). No spread of Japanese Knotweed to other areas of Banstead Downs.	Presence and abundance of Japanese Knotweed.
INNS	15	Long-term: eradication of Japanese Knotweed.	Presence/absence of Japanese Knotweed.

7.2 Feature 2 – Woodland

Assessment of significance

The woodland in Banstead Downs comprises Lowland Mixed Deciduous woodland, which is a HPI. In addition, much of the woodland falls within the SSSI and/or SNCI. It forms a secondary reason for the designation of the SSSI. It is therefore of national importance where it falls within the SSSI, and regional importance where it falls within the SNCI, supporting notable and protected species including Schedule 5 invertebrates and Schedule 1 birds.

Objectives

- Retain the lowland mixed deciduous woodland to its current extent.
- Increase the biodiversity value of the woodland on the site.

Threats to habitat and associated species

Left unmanaged, woodland tends to deteriorate in terms of biodiversity value. This is generally due to a loss of open space due to a closure of the tree canopy. This can lead to a loss of ground flora and associated species such as butterflies as well as a lack of tree regeneration. However some species do benefit from a dense canopy such as bats.

Other threats to woodland include the spread of invasive species. Cherry Laurel is present within all compartments in Banstead Downs, and while Japanese Knotweed was not recorded in the woodland compartments during the survey, it was recorded in grassland compartment 1.10, which is surrounded by woodland compartment 2.7. Cherry Laurel can severely reduce the biodiversity of woodlands. Their leaves are acidic and can result in a loss of calcareous substrate, losing the character of calcareous woodland. If left unmanaged these species can easily spread and will subsequently become even more difficult to eradicate. Their tendency to form dense stands prevents natural regeneration of the canopy, understorey and field layer, severely degrading the biodiversity value of the site. Japanese Knotweed has the ability to outcompete native flora with detrimental impacts on biodiversity and local infrastructure, such

as buildings and railways (which is of note as a railway runs adjacent to Banstead Downs (CABI, 2023)).

The Variegated Yellow-archangel stand is already spreading and outcompeting native woodland ground flora.

Dumping of waste vegetation within woodland areas can cause nutrient enrichment and the spread of non-native species through seeds and/or rhizomes.

Over-tidying of standing and fallen deadwood can remove the habitat for a number of protected and notable species that rely on this habitat, in particular fungi and invertebrates.

Grazing animals such as deer and invasive non-native Grey Squirrel can cause significant browsing damage to trees. Numbers of Grey Squirrel in England have been increasing in recent years and are predicted to continue rising (Matthews, 2018). Numbers of deer such as Roe Deer and Muntjac have increased in recent years and Muntjac is predicted to continue rising although Roe Deer are now considered to be stable (Matthews, 2018).

Tree diseases such as Ash dieback will likely cause the loss of the majority of Ash trees over the coming years. Additional tree diseases observed in these woodland compartments include Oak Processionary Moth and Horse-chestnut leaf-miner.

The effects of climate change over the next decade are likely to have significant impacts on the woodland habitat. The greatest threat to woodlands from climate change is likely to be an increase in the frequency and severity of summer drought. This could lead to an increase in stressed trees which are more susceptible to insect pests and diseases (Natural England and RSPB, 2019). In addition the majority of insect pests that currently affect UK woodlands are likely to benefit from climate change as a result of increased activity and reduced winter mortality (Broadmeadow, 2005). In addition the risk of wind-throw may increase if the UK experiences more storms (Natural England and RSPB, 2019).

The antisocial behaviour as a result of unrestricted public access that threatens the grassland habitats also threatens the woodland. A high concentration of dog walking activity increases the likelihood of soil nutrient enrichment encouraging an understorey of species such as Common Nettle and introduces a risk of chemicals such as imidacloprids and fipronil from flea and worming treatment being introduced into the soil, which can kill invertebrates indiscriminately. Fire can be a risk due to unpermitted barbeques and fire pits. The woodland has also been used to create tracks for mountain and dirt biking. This can damage the woodland through compaction of roots, which can cause trees to fail, as well as poaching/tracking which can prevent understorey growth, and pollution from fuel. Littering, including fly-tipping is also a risk.

Management measures and rationale

While the woodland falls within areas of SSSI and SNCI, it is not the focus of the HLS agreement, and therefore management of the woodland is not funded by this agreement. As such, management objectives are minimal, with the focus on at the minimum maintaining the status quo of the woodland. Opportunities to explore funding e.g. through BNG unit uplift may enable some of these objectives.

All woodland parcels in Banstead Downs have been assessed as moderate to good condition. Where they have been assessed as moderate, the scores are just underneath the threshold for good, and good condition could be achieved by eliminating Cherry Laurel as this will increase the total condition score by 2, enough to move above the threshold.

No intensive management will be undertaken due to lack of resources and funding for woodland management. However, it may be possible to apply for a grant and where resourcing allows, the main management focus should be on eradication of Cherry Laurel. The process of removal of these shrub layer invasive species will also create temporary areas of open space and will allow the remaining trees to develop more fully. As well as increasing the diversity of woodland ground flora, increasing the light in these areas will make conditions more suitable for woodland butterflies such as speckled wood, as well as encouraging the production of good quantities of seeds, berries and nuts on which the site's small mammals can feed.

In the long term, particularly if BNG unit uplift provides a viable means of funding, additional woodland management opportunities could be explored, particularly as the elimination of Cherry Laurel from the woodland compartments is sufficient to uplift all compartments to good condition, which is likely to be relatively low-cost and lower resource compared to other typical woodland management activities. This should be reviewed in Year 5 and viability for any additional prescriptions assessed and added to this plan, where found to be feasible.

Cherry Laurel is widespread throughout the woodland on the site and is becoming dominant in some areas. If left unmanaged this species will spread further and become even more difficult to eradicate. The species forms dense stands which prevents natural regeneration of the vegetation beneath and around it severely degrading the biodiversity value of the site. Therefore prioritising the removal of Cherry Laurel has the potential for significant biodiversity gains on the site.

Removing Cherry Laurel will open some areas up, especially closer to existing corridors and glades, and in time will encourage a more diverse shrub and field layer. It may take a few years to remove this species as it will often sprout back up even if spot treated with herbicide. Mechanical removal by manually cutting and pulling the stump from the ground using a heavy-duty hand operated winch is another option to consider. This technique can be effective at removing the root systems of these plants from the soil in a shorter timeframe although this may be more labour intensive. The cut material should be burnt to prevent its regrowth.

Cutting and then the use of herbicide (glyphosate) can be harmful to wildlife, therefore it is recommended that environmentally friendly eco-plugs are utilised to prevent regrowth, or direct stump treatment where this is not possible.

Drilling into the stump to create a hole and then inserting the glyphosate or a glyphosate containing 'eco plug' (see [Weed Killer For Woody Plants | Weed Control | ProGreen](#)) is an effective way to kill off the plant while reducing the potential contamination of surrounding habitat.

Where woodland falls within the SSSI, the above would need to be agreed in writing with Natural England prior to commencement.

In a natural or near natural state, a woodland should contain a full range of structures in balance. This includes:

- A canopy layer of mature trees.
- An understorey of immature and low growing trees.
- A shrub layer of low-growing shrub species and scrub.
- A field and ground layer of herbaceous plants, ferns, grasses and bryophytes.
- Deadwood habitat in each woodland layer and on the woodland floor.

Trees often need to be managed because of health and safety reasons. Unhealthy trees that are located close to well-used access routes may pose more of a risk for site users. Fallen or hung-up trees may need to be managed and secured to remove a potential hazard. Some of the cut brash or cord wood (cut sections of the main trunk and limbs) material from this management should be retained in the woodland as decaying wood habitat piles which will provide refuge and a food source for amphibians, reptiles, small mammals and invertebrates. Any such trees should be dealt with first, and often larger trees in such a scenario can significantly change the canopy structure and light levels so further management may not be as intense or required.

Work in woodlands will avoid the bird nesting season (typically March to August inclusive). Work will not be carried out when the ground is particularly soft to avoid damaging the soil.

It should be noted that felling or thinning trees may require a felling licence issued by the Forestry Commission (see section 8.2) and any tree management should be undertaken in the winter months between November and February (inclusive).

The LPA will hold information on any TPOs in the area. Land managers should check if any TPOs are present in their woodland and gain any seek any approval in areas where a TPO is active before any management activities commence.

A lack of suitable nesting/roosting sites can be a limiting factor for the presence of certain bat species on a site and can limit the increase in numbers of others. A variety of bat boxes will be installed as described below.

Three groups of three bat boxes will be installed. Within each group, the boxes will be located on one or nearby trees but facing different aspects. This is recommended by the Bat Conservation Trust (BCT) to provide a number of different options of temperature that the bats can move between based on their needs. At least one of the boxes in each group will have a south easterly to south westerly aspect (see Appendix 9 for further information on installing bat boxes). It is recommended that 6 crevice type boxes such as the Schwegler 1FF, or Beaumaris Woodstone Midi or equivalent are erected within the woodland compartments on mature trees, over 2m high.

Once installed the bat boxes should only be disturbed by an ecologist with a bat licence. It may be that a partnership could be developed with the Surrey Bat Group who may be able to monitor the bat boxes.

Oak Processionary Moth (OPM) is present across all parcels of lowland mixed deciduous woodland. The management and guidance as set out by the Forestry Commission for the management of OPM on Banstead Commons must be accorded with as well as reporting all new sightings of OPM via Tree Alert.

Table 10 presents a summary of the management measures.

Table 10: Feature 2 – woodland - management measures

Map reference	Action	Timing
2.1-2.10	Cherry Laurel clearance.	Winter Every two years
Blue square on Figure 5	Variegated Yellow-archangel clearance.	Winter when soil is damp but not frozen. Every year for five years, then review.
2.1-2.10	Felling for health and safety purposes.	Winter where it can be planned, otherwise as required.
2.1-2.10	Create log/habitat piles following habitat management.	As wood is created from woodland management work.
2.1-2.10	Install bat boxes (see table 10 for suggested numbers and types)	2025
2.1-2.10	A maintenance check of all box types. Should any box be in occupation, then the boxes should be left undisturbed.	Annually (Oct-Nov)

Targets and KPIs

The targets and KPIs are detailed in Table 11.

Table 11: Feature 2 – woodland - targets and KPIs

Target type	Target no.	Target	KPI
SSSI & BNG	16	All woodland compartments to be in good condition by 2033.	Condition of woodland compartments.
SSSI & BNG	17	Cherry Laurel to be absent on site by 2033.	Extent of Cherry Laurel.
SSSI & BNG	18	Variegated Yellow Archangel to be no more than rare on site by 2033.	Extent of variegated yellow archangel.
General enhancement	19	At least 6 bat boxes on trees throughout site by 2033	Number of bat boxes

8 Other focus points considered within this plan

In addition to the habitat features above, the following features are also important focus points of this management plan:

- Focus point A – Public access and engagement.
- Focus point B – Legal and other obligations.
- Focus point C - Survey, monitoring and review.

8.1 Focus point A - Public access and amenity value

Objective

To maintain the public access across the site for enjoyment, recreation and educational.

Management measures and rationale

Table 12 presents the management measures, supported by the rationale detailed in the sections below.

The primary management requirement for public access is to ensure that all PRowWs falling within Banstead Downs remain accessible, unimpeded and safe to the public. This may involve mowing, clearance of debris, felling of unsafe trees and other ad hoc requirements. These PRowWs also pass within golf course land, but are under the management jurisdiction of Banstead Commons Conservators. In addition, regular litter picking and the removal of fly-tipping will be undertaken.

Wherever possible, notice boards and other communication means will be used to reduce the occurrences of antisocial behaviour through education of the local community. Examples could include information on why removal of dog waste is needed, the importance of dogs on leads during nesting bird season, and long-term communications with the local biking community to reduce the impact of unpermitted bike routes. This could be pursued by engaging with local community groups, and organising educational site days for members of the public to attend.

The Banstead Conservators have recently obtained funding to set up a volunteer group for the commons. It is hoped that this will help to engage the local community with the site. In addition walks and talks will be provided if requested by local groups. Quarterly meetings, open to the public will continue to be held by the Banstead Conservators. In addition, efforts will be made to hold regular meetings with Reigate and Banstead Borough Council.

Quarterly Meetings are a statutory requirement and are open to the public. In addition, the Conservators facilitate a consultative group made up of user groups and biological recorders and liaison meetings with our primary funders Reigate and Banstead Borough Council both of which are held quarterly.

A programme of public engagement opportunities are held each year and include guided walks, family bioblitz days and presentations to local groups and societies.

Table 12: Public access and engagement – management measures

Compartment reference	Action	Timing
Whole site	Visual inspection of all paths with maintenance where required	Every 3 months
Whole site	Removal of litter and fly tipping	Every 3 months with fly tipping removed as soon as possible
Whole site	Visual inspection of furniture including notice boards, with maintenance where required	Once a year
Whole site	Running of volunteer work parties	Throughout the year
Whole site	BCC Quarterly Meetings open to the public	Every 3 months
Whole site	Quarterly meetings for the Banstead Commons Consultative Group	Every 3 months
Whole site	Programme of public engagement including guided walks, family bioblitz days and presentations to local groups and societies.	Throughout year

8.2 Focus point B – Legal and other obligations

Objective

To comply with all legislation and other obligations relevant to the site.

The following legislation is relevant to the site:

- Metropolitan Commons and Metropolitan Commons (Banstead) Supplementary Act 1866 (including Banstead Commons Bye-laws).
- Health and Safety at Work Act 1974.
- Wildlife & Countryside Act 1981(as amended).
- Protection of Badgers Act 1992.
- The Conservation of Habitats and Species Regulations 2017 (as amended).
- Environment Act (2021).
- Countryside and Right of Way Act 2000.
- Natural Environment and Rural Communities Act 2006.
- Wild Mammals (Protection) Act 1996.
- Forestry Act 1967 (as amended) – Felling Licences.

Management measures and rationale

In order to achieve this objective, liaison will take place with relevant authorities such as Reigate and Banstead Borough Council and Natural England (regarding the SSSI condition assessment surveys, and monitoring of the HLS targets). A risk assessment will be in place for the site. Table 13 presents the management measures, supported by the rationale detailed in the sections below.

An assessment of the likelihood of protected species being present within Banstead Downs can be found in Section 6.13 above. Appendix 6 gives details of relevant legislation and other

obligations. Below is an outline of action that will be taken to prevent committing an offence under the relevant legislation.

Roman Snail

Roman Snail is present on site. This species is protected under Schedule 5, Section 9 (1, 2 & 5a) of the WCA.

Any management activities that would result in the killing/injury or translocation of this species would require a licence from Natural England in order to proceed. Fortunately, this species has very restricted dispersal and can be easily avoided for most management activities. All staff and any contractors or volunteers should be made aware of how to identify this species, and due diligence should be made to check for its presence prior to any invasive management procedures. Should Roman Snails be found during this process an ecologist should be contacted to provide advice on the next suitable steps, including the potential requirement for a licence.

Reptiles

The survey area supports suitable habitat for Slow-worm, Grass Snake, Common Lizard and Adder, all of which are protected from intentional killing/injury.

There is likely no resource for reptile surveys to establish presence or extent of population, although SARG could be approached for this.

Ideally a reptile survey will be undertaken in order to establish which reptile species are present on the site and their key areas. Before this information is known the following precautions should be taken:

- Mowing of areas of long grassland should only take place during the summer months when reptiles are active and can move away from harm.
- A high cut (above 10cm) will be undertaken where possible to avoid injuring reptiles.
- If possible, each block of grassland will be cut in intervals staggered over a few weeks so that there is always sufficient cover available and some longer sections of grassland (cut biennially) will be retained as a refuge following the annual cut.
- Care will be taken to avoid cutting any obvious large grass tussocks or ant hills which can be used for refuge and reptile hibernating sites.
- Areas of dead wood or vegetation piles will only be moved during the summer months as they may be used by hibernating reptiles in the winter months.

None of the management prescriptions would result in the permanent destruction of reptile habitat and will not affect the carrying capacity of any populations.

Where any refugia/hibernacula habitats require removal, these should be dismantled carefully by hand and relocated nearby.

Amphibians

Terrestrial habitat suitable for amphibians is present across the entire site, and there are aquatic habitats including a pond under the golf club jurisdiction.

No aquatic habitat would be impacted by the management prescriptions within this management plan. As for reptiles, no habitat loss is proposed. While there is habitat suitable

for Great Crested Newt, it should be feasible for any significant impacts to this species (if present) to be avoided through careful works methodology, such as that above for reptiles.

If any Great Crested Newt are identified during management works, the works must cease. If the works cannot be altered to avoid impacting on the Great Crested Newt, Natural England should be consulted and a mitigation licence may be required. This may require the need for Great Crested Newt survey.

Impacts to Great Crested Newt can be further avoided by undertaking best-practice vegetation clearance methods, ideally during the active season (April to September). However much of the grassland and tree clearance proposed should be undertaken in the winter and so care must be taken prior to any intensive management operations. Any stump pulling following tree felling activity or dismantling of hibernacula should be delayed until the active season.

Breeding birds

The proposed scrub clearance and woodland works may impact on breeding birds. In addition, cutting of long grass could also impact on ground-nesting birds (particularly as Skylark was recorded in the site). Any management of these habitats will be undertaken outside of the bird nesting season (1st March to 31st August inclusive), unless there is an overriding need e.g. health and safety. Where this is the case, the area should be checked for nesting birds prior to commencing the activity, and delayed if required in order for chicks to successfully fledge.

Bats

The survey area supports suitable habitat including roosting opportunities within the woodland and mature trees. Foraging and commuting opportunities are present across the entire site.

As much as possible, all mature trees on site will be retained, however where any trees require felling, particularly if they are mature trees with holes, split limbs or ivy cladding, a PGLRAT and/or presence/likely absence survey should be undertaken prior to any work taking place. If felling of a tree supporting a bat roost cannot be avoided, a bat mitigation licence will be required.

The Forestry Commission and Natural England, with assistance from relevant conservation organisations, have produced guidance to help understand the legislation and to use good practice to operate within the law, avoid the need for licensing and benefit European protected species. Following the guidance will show that site managers have taken all reasonable steps to comply with the regulations (Forestry Commission, 2013).

Hazel Dormouse

Although no Hazel Dormouse has been recorded on the site, as there is potential habitat and they could be present at low densities, a precautionary approach to woodland management works should be employed. The good practice guidelines produced by the Forestry Commission should be followed (Forestry Commission, 2019b). In summary this advises that woodland management work should be undertaken between November and the end of February when Hazel Dormouse are hibernating on the ground. Unnecessary disturbance to the ground will need to be avoided to prevent disturbing hibernating animals. Hand tools only should be used to minimise disturbance to the ground. Should a Hazel Dormouse or nest be found during any site works, these will need to cease immediately and an ecologist contacted for advice.

Badger

Although no Badger setts have been found on site, the habitats present provide suitability for Badger.

The management work recommended within this plan is unlikely to impact Badger, but a precautionary approach should be employed prior to any management work, and a walkover check undertaken for any signs of recent Badger activity.

Any works using plant or breaking ground within 30m or hand tools within 10m of a Badger sett are likely to require a licence. Should works near to a potential Badger sett be required, an ecologist should be contacted to discuss the best way forward.

Tree safety

There is a legal duty of care for BCC to take all reasonable steps to identify any possible sources of foreseeable danger and, as far as is reasonably practical, to remove or manage them on land that is under BCC's management.

To enable these priorities to be met sufficiently regarding tree safety on the Commons, the BCC has adopted a Tree Inspection Policy (Banstead Commons Conservators, 2023a) and Methodology (Banstead Commons Conservators, 2023b) which is adhered to when carrying out tree inspections.

Tree Preservation Orders (TPOs)

It is unknown whether any of the trees on the site are covered by Tree Preservation Orders. The Local Council will be consulted regarding this before work to any trees takes place.

Felling licence

Felling or thinning trees may require a felling licence issued by the Forestry Commission and any tree management should be undertaken in the winter months between November and February (inclusive). In any calendar quarter you are allowed to fell up to 5m³ on your property without a felling licence (in fallen timber this would generally look like the amount it would take to fill a small car). You are also allowed to lop off branches without a felling licence and remove trees under around 10cm in diameter at breast height (think bean can width).

For woodland compartments where some thinning is recommended an exception to the 5m³ per calendar quarter applies to trees that have a diameter over bark of 10cm or less when measured 1.5m from ground level. For existing areas of coppice the exception applies to trees with individual stems that have a diameter over bark of 15cm or less (Forestry Commission, 2020).

However, it should be noted that the BCC is currently in communications with the Forestry Commission regarding an exemption under 'public open space'.

Protected species licence

If good practice principles are strictly adhered to the requirement for a mitigation licence can be avoided prior to management work. If in doubt, contact an ecologist for advice. See Appendix 12 which gives a checklist for when a licence may be required when carrying out woodland operations.

Biosecurity

It is important that biosecurity measures are considered to reduce the spread of non-native species and diseases within and between sites. See Appendix 13 for basic biosecurity advice.

Table 13: Legal and other obligations – management measures

Compartment reference	Action	Timing
Whole site	Follow precautions in section 8.2 of management plan to prevent committing an offence under protected species legislation	Ongoing
Whole site	Up to date risk assessment for the site	As required, to be updated once every 6 months at minimum.
Whole site	Liaise with relevant organisations such as Reigate & Banstead Borough Council, Natural England and Forestry Commission	As required
Whole site	Tree safety inspection	Once a year
Whole site	Patrol for site encroachments	Regularly when on site
Whole site	Consult local council regarding tree preservation orders before any tree work takes place	As required

8.3 Focus point C – Survey, monitor and review

Objective

This management plan will be monitored to ensure that the management remains effective and that the objectives and targets are achieved. Adequate survey data for the species and habitats should be used to inform management activities. The plan will be reviewed in its entirety in 2033.

Management measures and rationale

It is important that adequate survey and monitoring takes place so that sufficient information is available to make the best management decisions. It will also enable the KPIs to be reviewed and progress against targets assessed. This will highlight whether a change to management action is required. A summary of the survey and monitoring work to be carried out is given in Table 14 below.

A condition assessment of all habitats in Years 5 and 10 will be used to monitor and review management measures as required.

A check for non-native invasive plant species, particularly those on Schedule 9 of the WCA, will be undertaken at least annually.

As discussed previously, local species groups, such as the Surrey Bat Group, Surrey Reptile and Amphibian group, Surrey Bird Club and Surrey Dormouse Group could be approached for assistance around species survey and monitoring.

Progress towards achieving the actions within this management plan will be reviewed annually with a more detailed review of progress towards achieving targets in 2028. The action plan will be amended as necessary to ensure that it remains realistic.

Resourcing for any species survey is highly limited, however there are opportunities to invite species interest groups and volunteers to undertake surveys in order to receive baseline data. Typically the main requirement is that species data is shared with these groups, post-surveys. This is something that has been undertaken in the past, for example Butterfly Conservation survey transects, fungal forays etc.

This management plan is designed to cover the next 10 years. In 2033 the entire management plan will be reviewed and ideally a new plan developed for the next 10 years. It should be noted that BNG targets span 30 years, these will need to be taken over to the new plan as required.

Table 14: Survey, monitor and review - management measures

Map reference	Action	Timing
All habitats	Updated condition assessment (to encompass HLS targets and BNG metric 4.0 condition criteria) within the optimal survey period. Tree disease should also be checked.	March-September Years 2028 and 2033
All habitats	Monitor annually for the presence of Schedule 9 non-native invasive species. If found, create an action plan for their control which will depend on the priority of the compartment they are found in.	Summer Annually
All habitats	Investigate opportunity for species surveys for reptiles, amphibians, birds, bats, other mammals and invertebrates.	Ongoing
All habitats	Staff and visitor wildlife recording scheme.	Ongoing
All habitats	Review progress towards achieving actions.	Annually
All habitats	Review progress towards achieving objectives and targets.	Years 2028 and 2033
All habitats	Review management plan and produce plan for next 10 years.	Year 2033

9 Biodiversity net gain assessment

Table 16 details the total biodiversity gains that could be generated as a result of implementing this management plan (further details of how this was calculated can be found in Appendix 2: Methodology and in the BNG Spreadsheet provided as a separate document).

Table 15: Biodiversity gains

Headline results		Banstead Downs ⁴
Onsite baseline	Habitat units	1526.08
Onsite post-intervention	Habitat units	1576.77
Total unit change	Habitat units	+50.69
Total % change	Habitat units	+3.32%

10 References and bibliography

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> 10 % gain	0 – 9% gain	< 0% gain
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