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Rother District Council

Biodiversity Audit

Land at Kingsmead, Battle

Land at Kingsmead, Battle

1.1. Introduction

In March 2023, MKA Ecology Ltd was commissioned by Rother District Council to undertake Biodiversity Audits of 23 sites owned and managed by the district council. The aims of the biodiversity audits were to provide baseline information on the type and quality or condition of these areas with a view to identifying measurable opportunities for positive biodiversity interventions using the Biodiversity Metric. This report refers specifically to Land at Kingsmead, Battle (referred to from here as Kingsmead).

1.2. Methodology

The audits were performed using standard methodologies; habitats were defined according to the UK Habitat Classification and habitat conditions were assessed against the 'Biodiversity Net Gain' metric schema (Natural England, 2023a; Natural England, 2023b). By assigning values to habitats by their 'distinctiveness' or rarity, and their condition, the overall measurable biodiversity contained within the surveyed sites was calculated using the Defra Biodiversity Metric (v4.0). In principle, larger/longer, more valuable and better condition habitats score more highly. A detailed methodology is provided at the end of this document.

1.3. Site status

Kingsmead is located within the High Weald National Landscape (formerly known as Area of Outstanding Natural Beauty (AONB) and High Weald National Character Area (NCA). It is not currently covered by any international, national or local nature conservation designations.

The site is adjacent to the Great Wood Biodiversity Opportunity Area (Sussex Biodiversity Partnership, 2024). The lowland mixed deciduous woodland on-site is included on Natural England's Priority Habitat Inventory (Natural England, 2023c).

1.4. Site description

Kingsmead is located on the top of a hill in the centre of the town of Battle (central grid reference: TQ 74678 16656). It is 2.7ha in size, and consists of two parcels of grassland, surrounded by woodland to the north and through the centre of the site. Scrub, bracken and lines of trees line the east, south and west boundaries. The site is surrounded by residential development, with a mosaic of arable fields, woodland and hedgerows in the wider landscape.

Kingsmead is a recreational area and appears to be popular with local residents, given the footfall observed during the site visit. Paths are mown around the perimeter of each grassland, but otherwise

the sward is left to grow long. None of the woodland, scrub or bracken appears to be under regular management, although indicators of visitor pressure impact are evident in the woodland to the north of the site (well-worn and widened footpaths, litter).

The table below shows the habitats which are present at Kingsmead. Detailed descriptions of each habitat type are given in Section 1.16.

Habitat type	Description
Bracken	Areas dominated by bracken <i>Pteridium aquilinum</i> larger than 0.04ha.
Other neutral grassland	A widespread grassland type, distinguished by an absence of strong calcareous or acidic indicator species, and low occurrence of palatable grasses typical of modified grassland.
Other lowland acid grassland	Grassland growing on acidic soils with acidic indicator plant species, and low occurrence of palatable grasses typical of modified or improved grassland.
Bramble scrub	Dense scrub dominated by bramble <i>Rubus fruticosus</i> agg.
Mixed scrub	Dense scrub containing a mixture of species with no one species dominating.
Developed land; sealed surface	Areas of road, carpark and paths.
Lowland mixed deciduous woodland	Includes both semi-natural and ancient woodland growing on a range of soil types, comprising native deciduous tree and shrub species. Deciduous species occupy >80% of tree cover.
Other woodland; broadleaved	Mixed deciduous woodland types that do not meet the criteria to classify as Priority Habitat woodland.
Rural tree	Individual trees in a rural environment; adjacent trees are placed in groups for the purposes of assessment.
Line of trees	Native and non-native trees planted in distinct lines throughout the park.

1.5. Maps

The maps presented below show the existing habitats at Land at Kingsmead, Battle and their conditions. Quadrats (1m²) were used to determine the average number of species per square metre in the grassland, which informs the condition assessments for Biodiversity Net Gain.

Figure 1: UK Habitats Classifications map

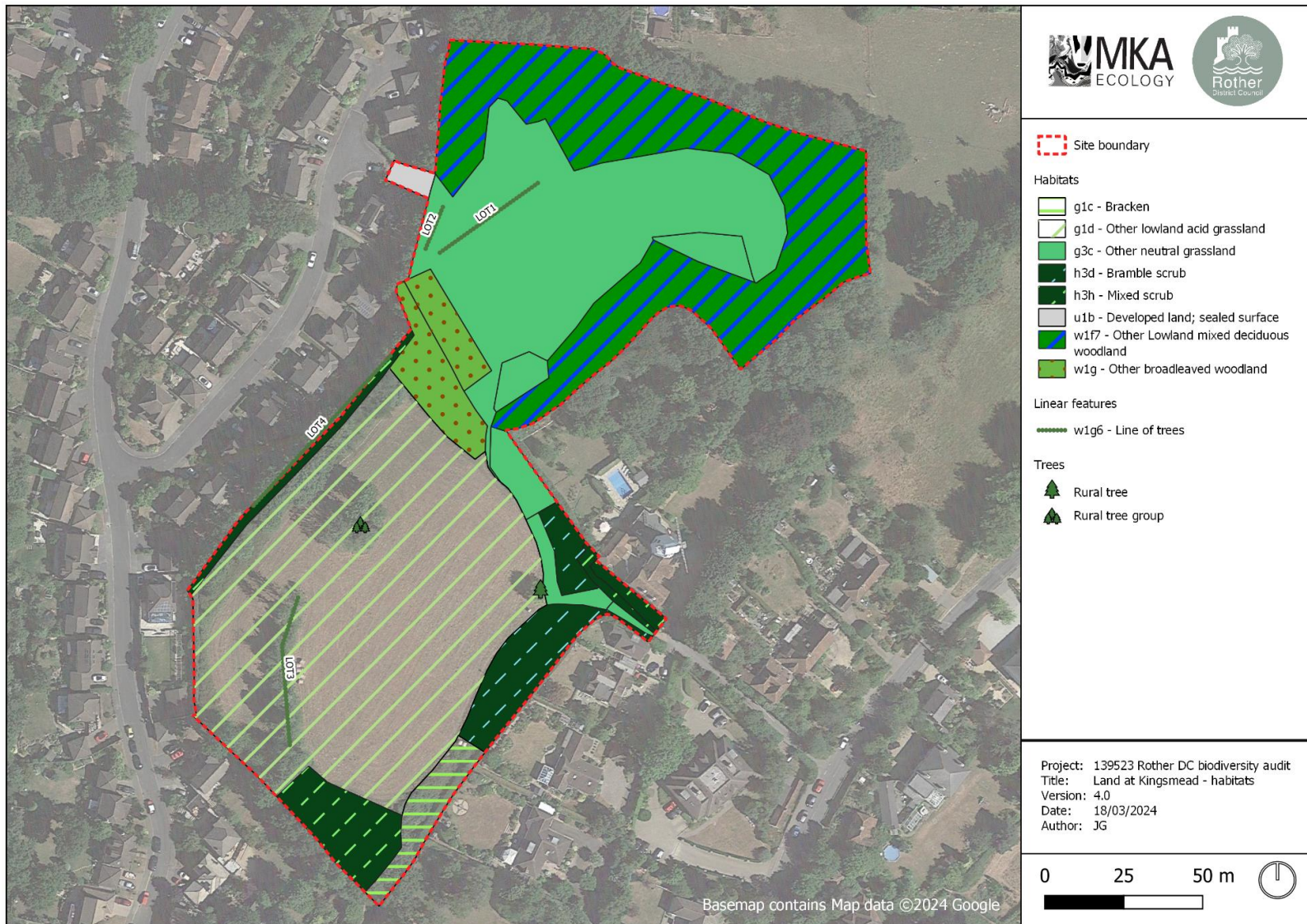
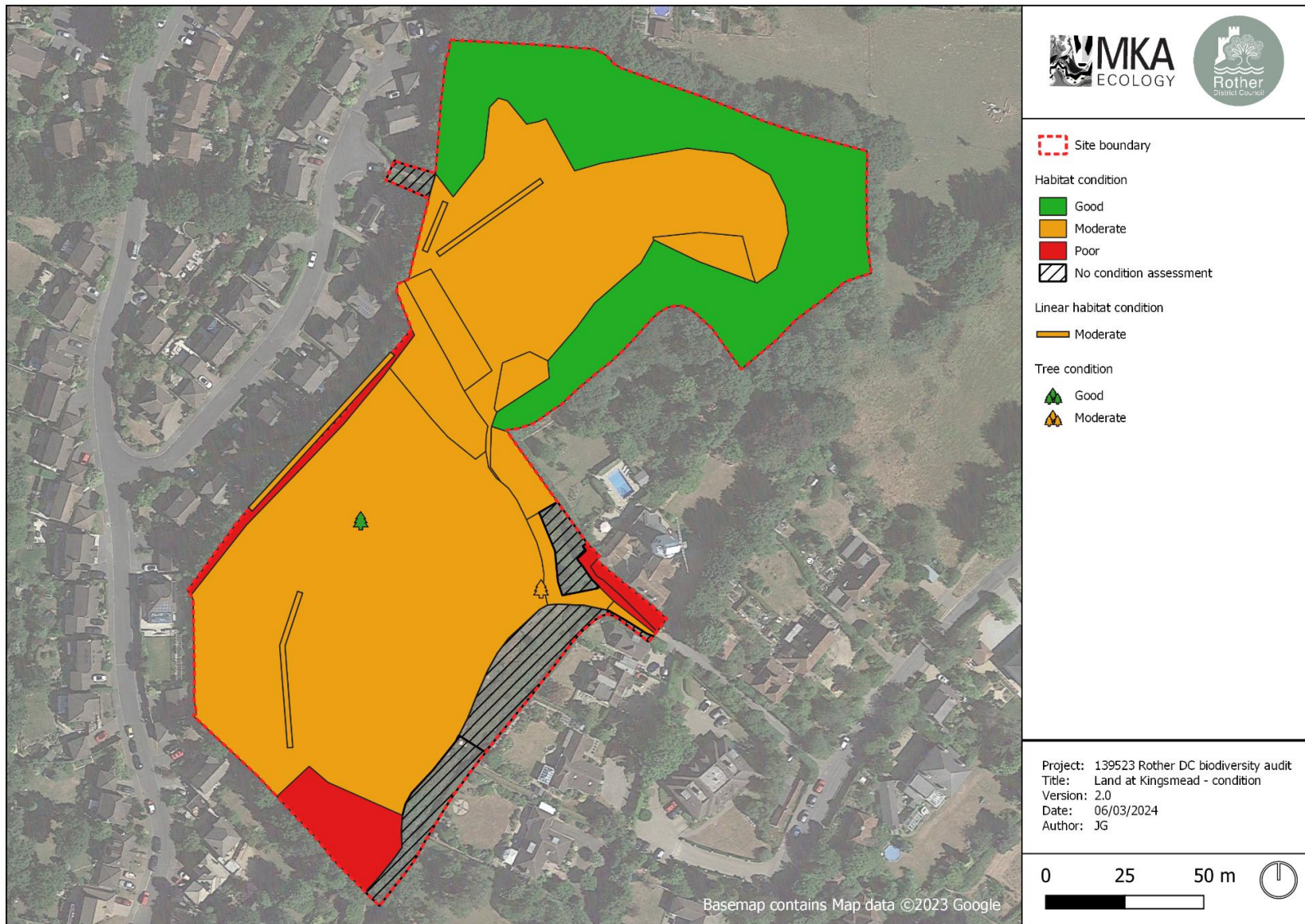


Figure 2: Condition assessments



1.6. Photographs

Photograph 1: Bracken



Photograph 2: Other neutral grassland (north parcel)



Photograph 3: Other lowland acid grassland (south parcel)



Photograph 4: Bramble scrub



Photograph 5: Mixed scrub



Photograph 6: Other lowland mixed deciduous woodland



Photograph 7: Other broadleaved woodland



Photograph 8: Line of trees (LOT1)



Photograph 9: Line of trees (LOT2)



Photograph 10: Line of trees (LOT3)



Photograph 11: Line of trees (LOT4)



1.7. Priority habitats

The following Priority Habitats are present at this location;

- Lowland mixed deciduous woodland.

Habitats of Principal Importance are recognised as the most important habitats in the UK and are listed within the Natural Environment and Rural Communities Act (2006).

1.8. Biodiversity units

The biodiversity units at Kingsmead, based on broad habitat types, are shown in the table below.

Habitat type	Total biodiversity units
Lowland mixed deciduous woodland	12.23
Other woodland; broadleaved	0.90
Other neutral grassland	5.64
Other lowland acid grassland	9.03
Bracken	0.10
Bramble scrub	0.44
Mixed scrub	0.50
Rural trees	0.93
Developed land; sealed surface	0.00
Total habitat units	29.76
Linear features type	Total biodiversity units
Line of trees	0.74
Total hedgerow units	0.74

1.9. Invasive non-native species

No invasive non-native species were recorded at Kingsmead.

1.10. Constraints

Below are detailed some constraints relating to protected and notable species, which should be considered as part of habitat enhancement or creation programmes. It should be noted that most risks associated with protected species constraints can be easily avoided with appropriate planning.

- Potential presence of nesting birds within vegetated habitats;

- Potential presence of reptiles in grassland, woodland and scrub habitats. There is suitable habitat at the site, and records of grass snake *Natrix helvetica helvetica* in the data search (SxBRC, 2023) but connectivity with the wider landscape is limited;
- Potential use of the habitats onsite by foraging and commuting bats.
- Potential presence of roosting bats in trees;
- Potential presence of hedgehogs *Erinaceus europaeus*.
- Potential presence of badger *Meles meles* setts (no setts recorded during the site visit).
- Potential presence of hazel dormouse *Muscardinus avellanarius* in woodland and scrub habitats. The likelihood of presence is low: there are no local records in the data search (SxBRC, 2023), and although there is plentiful suitable habitat for this species onsite (woodland and scrub), connectivity with further habitat in the wider landscape is limited.

1.11.Opportunities

The following sections detail the potential opportunities for creating new habitats or enhancing existing habitats at Kingsmead, and also measures to provide further opportunities for priority species. Although this site is located within the BOA for Great Wood, it is suggested that a focus on woodland management is balanced with maintaining other valuable habitats at the site.

Opportunities – Habitats

Habitat type	Opportunities
Lowland mixed deciduous woodland	The site is located within a Biodiversity Opportunity Area characterised by woodland, much of which is ancient. This woodland parcel, though small, forms part of a wider network of treelines running through surrounding suburban habitats in Battle, and connecting with treelines and woodland in the wider rural landscape. The site holds limited potential to expand woodland planting, due to the high distinctiveness of other habitats already present (grassland). This woodland parcel is also currently in good condition. However, it was evident during the site visit that recreational pressure is high in certain areas of the woodland, around public footpaths. A woodland management plan should be developed to ensure recreational pressure does not begin to adversely affect the woodland and decrease its condition. The management plan could also address other factors limiting condition of the woodland, including age and structural complexity.

Habitat type	Opportunities
Other woodland; mixed	<p>This immature woodland forms a good complement to the adjacent mature woodland parcel. This woodland should be included within a management plan (see above), with the main objective allowing it to mature, with some minimal tree thinning to allow some trees to develop into mature standards. Deadwood features, such as logpiles, could be introduced, and veteranisation of trees could be explored to accelerate this process and introduce more diversity, using the following techniques (Woodland Trust, 2014):</p> <ul style="list-style-type: none"> • Ring-barking • Branch breaks • ‘Horse – damage’ • Pollarding • ‘Monolith stumps’: Soft/selective felling of limbs where necessary (i.e., for safety) to leave tall trunks in situ.
Other neutral grassland	<p>This habitat is in moderate condition and clearly already subject to a wildlife-friendly mowing regime. Some further interventions, which would improve condition of this habitat are:</p> <ul style="list-style-type: none"> • Regular management to keep levels of scrub and bracken encroachment below threshold levels; • A programme to reduce undesirable species in the sward (creeping buttercup, in this case); and • Increase botanical diversity as a longer-term goal. Soil sampling is recommended to inform appropriate management.
Other lowland acid grassland	<p>This habitat is in moderate condition and clearly already subject to a wildlife-friendly mowing regime. Some further interventions, which would improve condition of this habitat are:</p> <ul style="list-style-type: none"> • Further survey (soil sampling and botanical assessment) to understand conditions at the site and inform the best management approach for either restoring acid grassland, or supporting development of a species-rich neutral grassland; • Extending the mowing regime slightly to vary sward height throughout the grassland (as well as

Habitat type	Opportunities
	maintaining paths), open up the sward and increase cover of herbaceous species.
Bracken	This habitat type is allocated low distinctiveness in the Biodiversity Metric. The areas of bracken as they are now likely form an important part of the habitat mosaic at Kingsmead and form part of a wildlife corridor around the perimeter of the site (with the scrub and trees). However, bracken can become invasive, particularly in grassland, and needs proactive management to maintain its cover at sustainable levels. As part of the management plan for the site, prevent further bracken encroachment into areas of grassland, and keep overall cover across the site at current levels.
Scrub	<p>Bramble and mixed scrub are both allocated medium distinctiveness in the Biodiversity Metric. This habitat is currently limited to the perimeter of the site, around the south parcel of grassland. As they are now, the scrub parcels are likely an important part of the habitat mosaic at Kingsmead and form part of a wildlife corridor around the site (with the bracken and trees). The parcels are currently in poor condition (or allocated no condition assessment in the case of bramble). It is important to balance enhancement of scrub with ensuring that encroachment does not compromise the condition of adjacent grassland habitats. Suggested interventions for these habitat types to maintain cover and improve their condition therefore are:</p> <ul style="list-style-type: none"> • Prevent further scrub encroachment into areas of grassland, and keep overall cover of mixed and bramble across the site at current levels. • Introduce rotational management (strimming/coppicing) to encourage a wider range of age classes and growth stages within the scrub. • Increase diversity of mixed scrub parcels by planting native woody species (plan species mix and placement carefully to minimise risk of encroachment into grassland habitats).

Habitat type	Opportunities
Trees	<p>All individual and grouped trees at the site are currently in good condition, while the lines of trees are in moderate condition. All the trees add to the connectivity value of the woodland through the site. There is potential to enhance this further through tree planting to increase their length and connect with adjacent treelines or woodland; particularly for LOT2 and LOT4. In addition, the following enhancements are recommended for trees:</p> <ul style="list-style-type: none"> • Install bird and bat boxes to compensate for lack of veteran features on lines of trees and the individual beech tree; • Where feasible and this aligns with amenity objectives, investigate veteranisation of existing trees (see above).

Opportunities - Species

Species	Opportunities
Invertebrates (saproxylic)	<p><i>Standing deadwood piles:</i> The creation of 'stumperies' with large volume wood (as generated by management works) dug into the soil (eg: PTES, 2016).</p> <p><i>Artificial rot-holes:</i> Cavities cut into stumps to mimic rot holes. These often fill with water and provide habitat for the larvae of a range of specialist invertebrates.</p>
Invertebrates (pollinators)	Increasing the proportion of wildflowers within the grassland will create additional foraging habitat for pollinators.
Invertebrates (generalist)	'Bug hotels,' 'bee banks' and log piles could be installed around the Site.
Birds	Installation of generalist bird boxes where possible, for instance on mature trees. Bird boxes with varying entrance hole sizes should be used to provide for a range of species.
Reptiles	Reptiles may be present at the site, and could be supported through creation of bespoke reptile refugia and hibernacula, providing additional areas for basking and foraging.
Bats	Installation of bat boxes where possible on mature trees

1.12. Key targets for the short and long term

Short-term targets

Some key targets for upcoming 5 to 10 years:

- Further botanical surveys and soil sampling of acid grassland (south parcel) in particular, to inform management approach;
- Reduce undesirable species within neutral grassland (north parcel);
- Create a management plan for the woodland, including managing recreational impacts and increasing age and structural diversity;
- Introduce rotational management of scrub and bracken;
- Investigate feasibility of veteranizing trees (woodland and lines of trees);
- New tree-planting to extend lines of trees (LOT2 and LOT4).

Long-term targets

Some key targets for long term planning;

- Review woodland management plan;
- Increase botanical diversity of neutral grassland;
- Restore acid grassland (subject to results of further investigation).

1.13. Further monitoring work/other activities

Specific surveys for protected and priority species could be undertaken for bats, invertebrates and reptiles. There are survey methods for all these species which can be undertaken by volunteers; groups could be supported by a licensed ecologist or local specialist if needed.

These targeted surveys could be supplemented by regular Bioblitz surveys at the site, carried out by volunteer groups, to monitor general species diversity.

Further specialist botanical survey work, and soil sampling, is recommended to inform management activities to enhance grassland habitats.

1.14. Future risks to condition

- Potentially increased levels of recreational pressure;
- Changes in management and land use;
- Tree disease;

- Impacts of climate change on the habitats present, such as increased drought, fire and flood risk; and
- Introduction and spread of invasive, non-native species.

1.15. Habitat descriptions and conditions

Grassland
<p><i>UKHabs habitat types present (secondary codes in brackets)</i></p> <p>g1c - Bracken</p> <p>g3c – Other neutral grassland</p> <p>g1d – Other lowland acid grassland</p>
<p><i>Description</i></p> <p>g1c – Bracken</p> <p>In the far south corner of the site, a stand of a dense bracken <i>Pteridium aquifolium</i> has developed. Bracken is also present scattered in the grassland throughout the rest of the site. This area in the south corner is >0.04ha, and therefore qualifies as the bracken only habitat type. This stand has likely developed due to this area of land being subject to less regular management than the grassland parcels.</p> <p>There are two parcels of grassland at this site, both on slightly acid and clay soils (LandIS, 2024). The north parcel is on a gentle slope and is surrounded by woodland; the south parcel is more exposed and on a north-west facing slope.</p> <p>g3c – Other neutral grassland (north parcel)</p> <p>In the north parcel, dominant grasses are Yorkshire fog <i>Holcus lanatus</i>, common bent <i>Agrostis capillaris</i>, creeping bent <i>Agrostis stolonifera</i>, cock's-foot <i>Dactylis glomerata</i> and meadow foxtail <i>Alopecurus pratensis</i>. False oat-grass <i>Arrhenatherum elatius</i>, sweet vernal grass <i>Anthoxanum odoratum</i> and perennial rye-grass <i>Lolium perenne</i> are also present in less abundance. Common sorrel <i>Rumex acetosa</i> and creeping buttercup <i>Ranunculus repens</i> were the most frequent herbaceous species recorded, with hogweed <i>Heracleum sphondylium</i>, bluebell <i>Hyaconthoides non-scripta</i> and common knapweed <i>Centaurea nigra</i> also present in some quadrats. Common bird's-foot trefoil <i>Lotus corniculatus</i>, greater bird's-foot trefoil <i>Lotus pedunculatus</i> and meadow vetchling <i>Lathyrus pratensis</i> are also present, but recorded infrequently. The sward was mostly long at the time of survey, with some paths mown through for access.</p> <p>Although situated on slightly acid soils (LandIS, 2024), the species composition present is more indicative of a neutral grassland community. The presence of the surrounding woodland, along with slightly damper conditions resulting from topography compared to the south grassland parcel, and lack of management, may have resulted in enrichment of the soils in this part of the site.</p> <p>g1d – Other lowland acid grassland (south parcel)</p> <p>In the south grassland parcel, the composition of dominant grasses is slightly different to that in the north parcel; Yorkshire fog and common bent are still prominent, but creeping bent is much less</p>

common and replaced by sweet vernal-grass. Crested dog's-tail *Cynosurus cristatus*, red fescue *Festuca rubra* and smaller cat's-tail *Phleum bertolonii* are also present, along with field wood-rush *Luzula campestris*. Herbaceous species present are essentially the same as those recorded in the north parcel: bird's-foot trefoil, greater bird's-foot trefoil, common sorrel, creeping buttercup, meadow vetchling and bluebell. The sward was mostly long at the time of survey, with some paths mown around the perimeter for access.

This habitat parcel is classified as acid grassland (g1d) on the basis of the apparent underlying soil conditions, along with the appearance and frequency of some acidic indicators and certain grass species in the sward (common bent, sweet vernal grass, field woodrush). However, the field does not show a strong presence of acidic species. Acid grassland is a transient habitat type, and vulnerable to nutrient inputs. It could be that past management has subjected the land to nutrient inputs that have altered the composition of the soil and led to degradation of this habitat type.

Condition

g1c – Bracken: N/A – Other

g3c – Other neutral grassland (north parcel)

Moderate condition. This parcel has sufficient variation in sward height, with below threshold levels of scrub and bracken encroachment (the scrub bordering the grassland is big enough to qualify as a different habitat parcel). However, condition is limited by species diversity, with fewer than ten species per m² recorded (average 5.4 species recorded in quadrats); presence of undesirable species (creeping buttercup) also passes threshold levels of 5%.

g1d – Other lowland acid grassland (south parcel)

Moderate condition. Undesirable species are currently only present in low abundance (creeping buttercup), and there is minimal bracken and scrub encroachment (the scrub and bracken bordering the grassland is big enough to qualify as different habitat parcels). However, the field currently does not show a strong presence of acidic indicator species, and sward height is not sufficiently diverse across the habitat parcel. Species richness is not a criterion for acid grassland condition assessments. However, it is notable that an average of 8.8 species per m² was recorded in quadrats in this grassland; higher than the adjacent north parcel of neutral grassland.

Heathland and scrub

UKHabs habitat types present (secondary codes in brackets)

h3d – Bramble scrub

h3h - Mixed scrub

Description

h3d – Bramble scrub

Areas of scrub dominated by bramble *Rubus fruticosus agg.* are growing along the south and east boundaries of the site, on the edge of the southern grassland parcel. This has likely developed due to this area of land being subject to less regular management than the grassland parcels.

h3h - Mixed scrub

Parcels of scrub, in varying levels of maturity, line the boundaries of the southern grassland parcel. This habitat type is allocated where bramble scrub is also interspersed with hazel *Corylus avellana*.

Condition

h3d – Bramble scrub: N/A - Other

h3h - Mixed scrub

Poor condition. The scrub has low species diversity (only one woody species present) and poor age and structural diversity. However, no invasive non-native species were recorded, and this habitat is bordered by tall grassland.

Woodland

UKHabs habitat types present (secondary codes in brackets)

w1f7 – Other lowland mixed deciduous woodland

w1g – Other broadleaved woodland

Description

w1f7 – Other lowland mixed deciduous woodland

A belt of mature woodland forms the northern boundary of the site and surrounds the north parcel of grassland. Tree species making up the canopy layer consist predominantly of pedunculate oak and ash *Fraxinus excelsior*, with hazel *Corylus avellana*, field maple *Acer campestre* and willow *Salix sp.* in the understorey. The ground flora includes ancient woodland indicators for south-east England, including bluebell and ramsons *Allium ursinum*, alongside male fern *Dryopteris filix-mas* and bracken.

There are numerous informal paths throughout the wood, some well-worn. The widest point of the woodland, in the east of the site, contains no clearings, but alongside the footpath through the north

Woodland

of the woodland, in places fallen trees have created temporary clearings, with further evidence of use by humans. No direct evidence of deer browsing was observed, but there is evidence of rabbit *Oryctolagus cuniculus* activity (warrens, digging).

w1g – Other broadleaved woodland

A belt of immature woodland runs through the centre of the site and divides the two grassland parcels. Trees forming the canopy are all of a similar age, and include holly *Ilex aquifolium*, field maple and pedunculate oak. The woodland is heavily shaded, with little ground flora apart from ivy *Hedera helix*. A stand of rosebay willowherb *Chamerion angustifolium* is growing on the eastern edge, suggesting recent disturbance of this area of ground.

Condition

w1f7 – Other lowland mixed deciduous woodland

Good condition. No invasive plant species (such as rhododendron *Rhododendron ponticum* or cherry laurel *Prunus laurocerasus*) were recorded; more than five native woody species were recorded, covering over 80% of canopy cover, and ancient woodland indicators are present in the ground flora. Deadwood is also abundant, and there are several veteran trees within the woodland. The woodland scores less well on criteria relating to disturbance (on the basis of well-worn and widened footpaths), the age distribution of trees (an absence of saplings, possibly due to browsing pressure) and vertical structural complexity.

w1g – Other broadleaved woodland

Moderate condition. No invasive plant species (such as rhododendron or cherry laurel) were recorded; more than five native woody species were recorded, and these cover over 80% of canopy cover. This woodland parcel is not easily accessible, and so disturbance is minimal. However, there is very little deadwood present, there are no veteran trees, and no ancient woodland indicators in the ground flora.

Urban

UKHabs habitat types present (secondary codes in brackets)

u1b – Developed land; sealed surface

Description

u1b – Developed land; sealed surface

There is a small area of hardstanding in the north-west of the site, associated with a five-bar gate; likely used for access for management.

Urban

Condition

u1b – Developed land; sealed surface: N/A - Other

Trees

UKHabs habitat types present (secondary codes in brackets)

w1g6 – line of trees

g3c (32) – rural trees

Description

w1g6 – line of trees

LOT1: This consists of a line of semi-mature horse chestnut *Aesculus hippocastanum* trees running through the centre of the north grassland parcel. The trees are all of a similar age.

LOT2: This consists of a short line of semi-mature ash and birch *Betula sp.* trees lining part of the east boundary.

LOT3: This line of trees runs through the south of the southern grassland parcel. Species recorded include field maple and pedunculate oak.

LOT4: This consists of a short line of mature trees lining part of the east boundary.

g3c (32) – rural trees

A single beech *Fagus sylvatica* tree is growing in the north-east corner of the south grassland parcel. On the west side of the grassland, a group of immature pedunculate oak and sycamore *Acer pseudoplatanus* trees has established within the grassland.

Condition

w1g6 – line of trees

All four lines of trees are in **moderate condition**. They all consist of native tree species, have continuous canopy cover, and the majority of trees are in a healthy condition. All four fail on the basis of absence of veteran features and ecological niches – the majority of trees at this site, outside the woodland, are immature. LOT2 and LOT4, being boundary features, also fail criteria requiring lines of trees to be surrounded by semi-natural vegetation, as they are bounded by hardstanding on one side.

g3c (32) – rural trees

The individual beech tree is in **moderate condition**. It fails criteria relating to maturity (it is immature) and the associated lack of veteran features or ecological niches.

Trees

The group of sycamore and oak trees is in **good condition**. The trees fail the criterion for mature trees, as all are immature, but pass all remaining criteria relating to native species, continuity of canopy cover and presence of ecological niches.

1.16. References

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1.17. Surveyors

The survey was undertaken by Lydia Ennis ACIEEM. Lydia has six years' experience undertaking habitat surveys and delivering management advice to landowners. The report was written by Lydia and Joe Gillis, Graduate Ecologist, at MKA Ecology Ltd. Joe has a season's experience as an ecologist. The report has been reviewed by Will O'Connor CEcol MCIEEM. Will has over 15 years' experience working as an ecological consultant.

Detailed methodology

UK Habitat Classification

The habitat surveys followed the methodology of the UK Habitat Classification (professional) version 2.0 (hereafter UKHab; UK Habitat Classification Working Group, 2023). UKHab works at two levels: a hierarchical primary habitat classification and a list of secondary codes. The primary classification builds on existing habitat and botanical classifications (e.g., Phase 1, NVC). Habitats are described through an increasingly detailed hierarchy until a match is found. The secondary codes provide a list of environmental qualifiers that capture details for a range of other factors (e.g., hydrological regime, management etc). A given primary habitat area may have many secondary codes attached.

Some modifications to the UKHab were made as follows:

- Amenity grassland was categorised separately as 'g4a', a level 4 code of 'g4 - modified grassland'.
- Native hedgerows were categorised according to the more detailed Biodiversity Metric habitat label (see below). A level 5 hierarchy was created under the existing level 4 code 'h2a - Priority hedgerows' to reflect the differing features that hedgerows might contain in combination:
 - Association with a bank or ditch.
 - Species richness.
 - With/without trees.

Incidental plant species lists were gathered for each habitat and distributions of species estimated (using the DAFOR scale; **D**ominant, **A**bundant, **F**requent, **O**ccasional and **R**are). Full botanical inventories were not feasible within the scope of this work. Botanical lists are provided as a separate appendix to this Biodiversity Audit.

Biodiversity Metric

The Defra Biodiversity Metric 4.0 (Natural England, 2023) has been used for this Biodiversity Audit, with certain modifications as detailed in the Appendix. This method uses habitat as a proxy for biodiversity, whereby habitats are assigned the following 'multiplier' scores:

- **Distinctiveness:** A measure of the type and importance of a habitat. Habitats that are rare and/or support a wide range of species are more distinctive.

- Condition: A measure of the condition of a given habitat type. The condition is assessed according to a suite of criteria described within the methodology below. It should be stressed that condition in biodiversity terms is not to be confused with traditional perceptions of condition or maintenance. A grassland that might be perceived to be well maintained (e.g. regularly mown) is very likely to be in poor condition. Distinctiveness and condition are also not wholly independent. Some of the factors that lead to poor condition grasslands (intensive mowing or grazing) can also lead to a definition as a lower distinctiveness grassland.
- Strategic significance: Any site that possesses a designation is considered High, those deemed ecologically valuable but without designation are considered Medium, and those with limited ecological value and no designation are classed as Low.

These factors are then multiplied to the area (for habitat parcels) or length (hedgerows, lines of trees) to produce an overall 'biodiversity unit.' Large parcels of habitat or long linear features will score better.

The total number of units is presented for the surveyed areas, each site and by habitat type. Indications of how many units are currently contained within habitats of different conditions are also presented; this will help to indicate the opportunities that might be made to increase measurable biodiversity by improving the condition of existing habitats.

Condition assessments

Each habitat type was assessed for condition using the methodology outlined in the Defra Biodiversity Metric 4.0 (Natural England, 2023). Habitat condition is defined as either good, moderate or poor by assessment against a suite of condition criteria. A habitat in good condition will meet more of the criteria for good condition and fewer of the criteria for poor condition. A habitat in poor condition will meet fewer of the criteria for good condition and more of the criteria for poor condition. For the purposes of this assessment the interim categories of 'fairly good' and 'fairly poor' were not used because they are not clearly defined within the methodology and may present inconsistencies with future audit assessments. The habitat condition sheets were modified for use in the field and are supplied as supplementary data.

Habitats were therefore divided into parcels based upon their condition and minimum mappable unit of habitat area.



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