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23rd January 2019

Tracey Smith
Programme Officer
By email only to tracey.smith@cheltenham.gov.uk

Dear Tracey

Matter 7 of the Cheltenham Plan Examination Statement (Representor ID: 570)

This response in relation to Matter 7 of the proposed Examination Hearings into the Cheltenham Local Plan has been prepared by Ridge and Tetlow King Planning on the behalf of the West Cheltenham Consortium (Northern Trust Company Ltd, Barberry Cheltenham and Midlands Land Portfolio Ltd) in relation to their land interests at West Cheltenham. I would be grateful if the Inspector could be provided with a copy of this statement.

As you will be aware, the site is allocated for development within the Joint Core Strategy under policy A7 for

i. *"Approximately 1,100 new homes*
ii. *Approximately 45 hectares of B-class led employment land to be focussed upon a cyber security hub and other high technology and high 'Gross Value Added' generating development and ancillary employment uses;*
iii. *All development should be employment led, delivery of housing much be in tandem with employment development;*
iv. *A **comprehensive masterplan** and development strategy for the Strategic Allocation, set within the context of safeguarded land at West Cheltenham, which includes:*
    a. *A delivery strategy for employment focussed land release*
    b. *A positive impact on the regeneration of neighbourhoods in West Cheltenham*
    c. ***Integrates built form and a comprehensive network of accessible green infrastructure, including local green space**". (our emphasis)*

The West Cheltenham Consortium is currently preparing a planning application, which is anticipated to be submitted in Spring /Summer 2019 to Cheltenham and Tewkesbury Borough Councils.

Our main concern in relation to the Natural environment concerns the evidence base of the local plan which hasn't been updated. We are particularly concern that Section 10 of the local plan: Biodiversity and Geodiversity refers to Key Wildlife Sites which lists 'unimproved grassland at Fiddlers Green Lane'. The Key Wildlife Site was notified in 2000 and hasn't been formally reassessed since by the Wildlife Trust or Cheltenham Borough Council.

As part of our ecological survey work to support the application it has been concluded that the site is no longer of significant value to merit being a Key Wildlife Site. We enclose a summary report prepared by Ecology Solutions which confirms why the Key Wildlife Site is no longer of ecological value.

In order to meet the Gloucestershire KWS criteria for grasslands, a site must meet one the following:

- H5.1 – All grassland larger than 0.5 ha which are identified as one or more of the NVC types in Table H5a and which support 15 or more species from Table H5c.

- H5.2 – Areas of semi-natural grassland larger than 0.5 ha which are identified as one or more of the NVC types in Table H5b and which support 20 or more species from Table H5c.

- H5.3 – All semi-natural grassland below 0.5ha which fit the description for H5.1 or H5.2 where they occur in connection with other qualifying habitats, either as a mosaic or as an adjacent patch.

KWS supports only 8 species listed in Table H5c (see enclosed criteria list for selection of Key Wildlife Sites, GCER July 2015) and therefore no longer meets the criteria for designation as a KWS. On this basis, the site should be removed from the list of Key Wildlife Sites cited in the local plan.

It should be noted that an integral part of the part of the evolving masterplan for the site includes the provision of a network of green infrastructure which will include natural to formalised area of open space and therefore the scheme will create positive benefits to enhancing biodiversity and the natural environment.

I trust this letter clarifies matters and the West Cheltenham Consortiums representatives will be able to answer any further questions at the forthcoming public examination of the plan.

Yours sincerely

Giles Brockbank MRTPI
Partner
For Ridge and Partners LLP

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WEST CHELTENHAM, GLOUCESTERSHIRE

BRIEFING NOTE: FIDDLER'S GREEN LANE MEADOW KWS ASSESSMENT

INTRODUCTION

1. This document provides an assessment of the Fiddler's Green Lane Meadow Key Wildlife Site (KWS), that has been surveyed as part of a suite of surveys for the West Cheltenham allocation (A7), against the KWS designation criteria. Section 10 of the Cheltenham Local Plan states, in relation to Key Wildlife Sites, that one of the KWS in Cheltenham Borough is the *"unimproved grassland at Fiddlers Green Lane".*

ASSESSMENT OF THE KWS

2. Fiddler's Green Lane Meadow KWS was notified in 2000 and was identified as MG5 grassland and supporting 17 species listed on the designation criteria table. During the surveys undertaken by Ecology Solutions Ltd in 2016, the grassland was recorded as being grazed by Sheep during the July survey and by cattle during the September survey. No evidence of grazing was recorded during the April survey.

3. Species present within the sward of the KWS include frequently found Meadow Foxtail *Alopecurus pratensis*, Yorkshire Fog *Holcus lanatus* and Crested Dog's-tail *Cynosurus cristatus*, with occasionally found Field Woodrush *Luzula campestris*, Red Fescue *Festuca rubra*, False Oat-grass *Arrhenatherum elatius*, Meadow Barley *Hordeum brachyantherum*, Perennial Rye-grass *Lolium perenne* and Creeping Bent *Agrostis stolonifera*, and rarely found Timothy *Phleum pratense*, Common Bent *Agrostis capillaris*, and Cock's-foot *Dactylis glomerata*.

4. Herbaceous species present include occasionally found Creeping Buttercup *Ranunculus repens*, Cowslip *Primula veris*, Black Knapweed *Centaurea nigra*, Common Sorrel *Rumex acetosa*, Common Vetch *Vicia sativa* and Wild Onion *Allium vineale*, Bird's-foot Trefoil *Lotus corniculatus* and Red Clover *Trifolium pratense*, with rarely found Dandelion *Taraxacum officinale* agg., Common Nettle *Urtica dioica*, Ribwort Plantain *Plantago lanceolata*, Common Mouse-ear *Cerastium fontanum*, Spear Thistle *Cirsium vulgare*, Daisy *Bellis perennis*, Hogweed *Heracleum sphondylium*, Meadow Buttercup *Ranunculus acris*, Cleavers *Galium aparine*, Lords and Ladies *Arum maculatum*, Bulbous Buttercup *Ranunculus bulbosus*, Creeping Cinquefoil *Potentilla reptans*, Chickweed *Stellaria media*, Meadow Vetchling *Lathyrus pratensis*, Yarrow *Achillea millefolium*, Rough Hawkbit *Leontodon hispidus*, Creeping Thistle *Cirsium arvense*, Lady's Bedstraw

Galium verum, Agrimony *Agrimonia eupatoria*, Cut-leaved Crane's-bill *Geranium dissectum*, White Clover *Trifolium repens*, Selfheal *Prunella vulgaris* and Black Medick *Medicago lupulina*.

Detailed Botanical Surveys

5. Initial habitat surveys were undertaken of the grassland within the KWS in April 2016, with further detailed botanical surveys undertaken in July and September 2016 to ascertain the value of the grassland sward given its KWS designation. Quadrat surveys were undertaken on a number of locations throughout the field with all species present recorded and their approximate percentage cover of each $2m^2$ quadrat.

6. The survey undertaken identified the presence of a single broadly homogenous grassland type within this field, which is dominated by grasses, with evidence of a ridge and furrow field system.

7. During the detailed botanical surveys carried out in July and September, the grass sward was recorded as having been grazed by sheep and cattle and no evidence of Wild Onion or Cowslip were present within any of the quadrats.

8. The survey results were analysed using MAVIS analysis software to identify which NVC vegetation communities are most comparable to the samples contained within the quadrats for the July survey, the September survey, and the July and September combined surveys.

9. For the July survey, the analysis identified a number of communities which matched the grassland in the KWS with the top 10 coefficients. Of these, MG4 *Alopecurus pratensis-Sanguisorba officinalis* grassland and MG9 *Holcus lanatus-Deschampsia cespitosa* grassland were discounted on account that neither Great Burnet nor Tufted Hair-grass (both of which are constant species for these communities) are present within this field. The remaining communities recorded include: MG6a *Lolium perenne-Cynosurus cristatus* typical sub-community (coefficient 60.93), MG6 *Lolium perenne-Cynosurus cristatus* (coefficient 59.20), MG6b *Lolium perenne-Cynosurus cristatus* grassland, *Anthoxanthum odoratum* sub-community (coefficient 58.12), MG5a *Cynosurus cristatus-Centaurea nigra* grassland, *Lathyrus pratensis* sub-community (co-efficient 52.75), MG5 *Cynosurus cristatus-Centaurea nigra* grassland (coefficient 50.96), MG5b *Cynosurus cristatus-Centaurea nigra* grassland, *Galium verum* sub-community (coefficient 48.67), and MG6c *Lolium perenne-Cynosurus cristatus* grassland, *Trisetum flavescens* sub-community (coefficient 48.30). Of the grassland types, given their dominant species, it is not considered the KWS could be classified as MG6b or MG6c.

10. For the September survey, of the communities with the top 10 coefficients, the following communities / sub-communities were discounted on account that the constant species for these communities were not met by the species present within the KWS: MG9b *Holcus lanatus-Deschampsia cespitosa* grassland*, Arrhenatherum elatius* sub-community, MG9 *Holcus lanatus-Deschampsia cespitosa* grassland, MG12a *Festuca arundinacea* grassland, *Lolium perenne-Holcus lanatus* sub-community, MG9a *Holcus lanatus-Deschampsia cespitosa* grassland, *Poa trivialis* sub-community, MG11a *Festuca rubra-Agrostis stolonifera-Potentilla anserina* grassland, *Lolium perenne* sub-community, and

MG10a *Holcus lanatus-Juncus effusus* rush-pasture, typical sub-community. The remaining communities recorded include: MG6a (coefficient 48.27), MG1a *Arrhenatherum elatius* grassland, *Festuca rubra* sub-community (coefficient 45.74), MG1e *Arrhenatherum elatius* grassland, *Centaurea nigra* sub-community (coefficient 45.65), and MG6 (coefficient 45.39).

11. Combining the full set of survey data for both July and September, of these communities with the top 10 coefficients, the following communities / sub-communities were discounted on account of the constant species for these communities not being met by the species present within the KWS: MG9b, MG9, MG4, and MG9a. The remaining communities recorded included: MG6a (coefficient 59.12), MG6 (coefficient 57.42), MG6b (coefficient 55.43), MG5a (coefficient 53.06), MG5 (51.24), and MG5b (coefficient 50.67). Of the grassland types, given their dominant species, it is not considered the KWS could be classified as MG6b.

12. Of the above communities, the broad vegetation types recorded are MG1, MG5 and MG6.

13. The constant species for the MG1 habitat type are False Oat-grass and Cock's-foot, although False Oat-grass is found only occasionally within the sward and Cock's-foot found only very rarely. As such, it is not considered the grassland within the KWS meets this vegetation type.

14. The constant species for the MG5 habitat type are Crested Dog's-tail, Black Knapweed *Centaurea nigra*, Common Bent, Sweet Vernal-grass *Anthoxanthum odoratum*, Cock's-foot, Red Fescue, Yorkshire Fog, Bird's-foot Trefoil, Ribwort Plantain, Red Clover and White Clover. All of these species were recorded within the KWS, with the exception of Sweet Vernal-grass. Of the 81 species that are found within MG5 grassland, only 31 of these are present within the KWS (38%). In addition, the average number of species per sample for this habitat type is 23, while the average number of species recorded during the surveys undertaken was 15. As such, it is considered the grassland within the KWS is a poor match for an MG5 community.

15. The constant species for the MG6 habitat type are Perennial Rye-grass, Crested Dog's-tail, Common Mouse-ear, Red Fescue, Yorkshire Fog and Red Clover, all of which are present within the KWS. Of the 53 species found within MG6 grassland, 30 are present within the KWS (57%). In addition, the average number of species per sample for this habitat type is 13, and the average number of species recorded during the surveys undertaken was 15.

16. As such, it is considered that the grassland within the KWS is best described as MG6 or sub-community, rather than the MG5 grassland described within the KWS designation. It is considered that since designation, the grassland within this field has likely been degraded through poor management and overgrazing.

<u>Assessment Against the KWS Criteria</u>

17. In order to meet the Gloucestershire KWS criteria for grasslands, a site must meet one the following:

- H5.1 – All grassland larger than 0.5 ha which are identified as one or more of the NVC types in Table H5a and which support 15 or more species from Table H5c.

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18. The KWS is larger than 0.5ha (being 2.1ha), and as set out above has been identified as the NVC habitat type of MG6, which is not listed on Table H5a, although is listed on Table H5b. However, the KWS supports only 8 species listed in Table H5c. Given the above, it is considered that the KWS no longer meets the criteria for designation as a KWS. Indeed, during public exhibitions for the West Cheltenham allocation, the Gloucestershire Wildlife Trust attended and appeared to acknowledge verbally that the botanical interest had degraded and no longer warranted the KWS designation.

CONCLUSIONS

19. During Ecology Solutions Ltd's detailed botanical surveys in 2016, the KWS was identified as the NVC habitat type of MG6 and only supports 8 species listed in the designation criteria table (Table H5c), and therefore it is considered that this KWS no longer meets the criteria for designation as a KWS, and therefore does not warrant inclusion within section 10 of the Cheltenham Local Plan.

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CONCLUSIONS

19. During Ecology Solutions Ltd's detailed botanical surveys in 2016, the KWS was identified as the NVC habitat type of MG6 and only supports 8 species listed in the designation criteria table (Table H5c), and therefore it is considered that this KWS no longer meets the criteria for designation as a KWS, and therefore does not warrant inclusion within section 10 of the Cheltenham Local Plan.

Part 2: Criteria for selection of Key Wildlife Sites

Gloucestershire's Key Wildlife Sites are selected according to the general criteria and principles listed below, used in conjunction with minimum thresholds for selection of particular habitat types and species populations.

2.1 Checklist of General Key Wildlife Site Criteria

1 Size or extent

a. the site is an exceptionally large area of an important natural or semi-natural habitat e.g. the largest in the county, or the largest within a distinct region of the county
b. the site supports an exceptionally large and/or thriving population of an important species (as defined in the Species Criteria)
c. the site supports a high proportion of the total area of an important habitat or the total numbers of an important species in the county and/or in a wider national or international context

Principles for selection on the grounds of size or extent

Each KWS should be large enough to provide adequate site-based protection for the feature(s) for which it has been designated. In general, the larger the site, the better potential for conserving the biodiversity associated with it.

Rationale

A larger site provides a wider range of opportunities for biodiversity and more chance to contain all the elements of a particular habitat. It also reduces the proportion of the site which is exposed to "edge effects" such as damage from adjacent human activities (a common problem with fragmented and linear sites). The larger species populations in a bigger site benefit from a greater resilience to fluctuating natural conditions, either because of their more diverse range of habitat opportunities or because they have a sufficiently large population to benefit from increased genetic diversity.

2 Diversity

a. the site contains many of the typical species and assemblages – including stages of succession, subtypes and variations – for which a habitat type is considered important
b. the site contains the majority of species typical of the habitat as it is found in the county in its most favourable condition
c. the site contains a range of semi-natural habitats in close proximity
d. a range of successional stages of habitat development are present on the site
e. the habitats present exhibit a wide range of natural structural diversity

Principles for selection on the grounds of diversity

Where a site is selected on the grounds of diversity, special consideration should be given to the future management of the site, so as to ensure that management of one element of the habitat does not disadvantage another element, which can result in a reduction in overall diversity. Guidelines for judging the importance of assemblages for some species groups, such as birds, are included in the Species Criteria.

Rationale

A site with a diversity of habitats is more likely to support a greater biodiversity, and gives species more opportunities to survive adverse circumstances. An interface between two habitat types may be used by more species than exist in either of the individual habitats on either side of the transition zone. Diverse sites also benefit those species whose life cycle requires a wide range of situations – e.g. semi-aquatic invertebrates. Diversity has other potential advantages: it is often aesthetically pleasing to visitors, and can provide good educational opportunities. It may therefore be linked with the criteria for Value for appreciation of nature, and Value for learning. Diversity is also closely related to size of site, site history, and connectivity within the landscape.

Where one element of habitat on a diverse site requires a particular management, there is a danger that other elements can be reduced (e.g. removal of scrub in favour of grassland, loss of invertebrates in rough grassland due to yearly mowing or heavy grazing). It is therefore important to note in a KWS Assessment whether the diversity of the site is in itself an important feature that should be preserved for the benefit of biodiversity, or whether some elements appear to be undesireable (e.g. burnt or littered areas) or invasive.

A management annotation for wet grassland, showing desired structural diversity of the habitat. Sketches can help with management recommendations for diverse sites.

3 Naturalness and typicalness

a. compared with other examples in the county, the habitat present is notable for its lack of human disturbance, introduced plant or animal species, mechanical damage, litter, agricultural spray drift or other factors which could adversely affect the vegetation structure and/or species composition of the community
b. the site is an excellent representative of a habitat or species population that forms a distinctive element of Gloucestershire's biodiversity
c. the site represents an excellent example of a mosaic of associated habitats typical of Gloucestershire, e.g. floodplain grazing marsh, traditional orchards, species-rich hedgerows

Principles for selection on the grounds of naturalness and/or typicalness

The KWS criteria are designed to take into account the fact that much of the county's native biodiversity exists within semi-natural habitats that have been shaped by human activities. As is the practice nationally, site protection is more likely to be considered a priority if the habitats involved are considered to be:

- unusually pristine examples;
- exceptionally diverse;
- a recognised locally distinctive type, or
- impossible to restore once degraded or lost.

Rationale

There has been much discussion amongst conservationists about the relative importance of natural, semi-natural and recently-established habitats for biodiversity. A high proportion of native British Isles species have survived through colonising man-made environments during and following the removal of their original ecological niches. Such communities are known as semi-natural.

Semi-natural habitats are important both for the communities they support, and for the individual rare species that may occur there. Longstanding semi-natural habitats that have resulted from traditional land management practices tend to be more diverse and contain more rare species than farmland where regular rotations and modern fertilising systems are practiced. However, some more recent activities, such as quarrying, may also result in important areas of wildlife value. In the interests of biodiversity conservation, such sites will not be ruled out of the selection process just because they are not strictly "natural".

The KWS selection process should reflect the prevailing scientific opinion that **all** habitats with a high complement of native species, in communities which form an interdependent ecosystem, should be valued for their contribution to biodiversity conservation, whether technically natural or semi-natural. This is of particular importance in the light of climate change, which may necessitate an adaptation in habitat or species distribution if biodiversity is to survive.

4 Rare or Exceptional feature

a. the habitats and/or species present are rare, either in an international, national or county context
b. the site is the only example of a particular habitat sub-type or variation that cannot be protected elsewhere in the county
c. the scientific interest of the site is dependent on a rare or unique combination of site-related factors such as geology, aspect, soil type, microclimate, hydrology or altitude Consequently, if the site was damaged or destroyed, the habitat and species communities present would be irreplaceable to the county
d. the site supports habitats or species which are on the very edge of their natural range

Principles for selection on the grounds of rarity or exceptional feature

Sites will be assessed using the most recent species and habitat data available. A potential KWS will not be disqualified from selection on the grounds of deficient data; however, in such cases efforts will be made to confirm the importance of the site prior to designation as a matter of priority.

The presence of nationally important species will be a prime consideration when assessing potential KWS; however, simple presence of rare or protected species will not necessarily warrant KWS selection.

Rationale
In the case of rare species, simple presence on the site might not necessarily imply that the site has a colony or is depended on in some other way by that species. Suitability of the site's habitat for such purposes should also be taken into account.

The acceptable dates for species records which are used in order to assess sites will vary with the species or group. In general, invertebrate and lower plant surveys are less frequent than bird and vascular plant surveys, therefore older records sometimes have to be accepted for use with invertebrate or lower plant-based criteria. Rarity evaluations will make use of the best species distribution information available at the time. If new information comes to light indicating that a species is significantly more common or more rare than previously thought, a site proposed for designation may require a re-evaluation.

It is recognised that for some significant species – e.g. bats in domestic roof-spaces – Local Site designation is not a suitable approach to conservation, which is better met by legal protection and provision of suitable advice. Such features should not, however, be ruled out of the KWS system completely, as management of associated habitats may benefit these species.

5 Fragility

a. the habitats and/or species present are fragile or vulnerable to loss, damage or exploitation, either in an international, national or county context

Principles for selection on the grounds of fragility

Some sites may consist of scattered features, especially where the features in question are known to be fragile or vulnerable to "edge effects" due to fragmentation.

Where a KWS has vulnerable features, special care will be taken when visiting the site for survey and monitoring, and any management recommendations will be designed to minimised potential disturbance or damage.

KWS with fragile features are likely to include "buffering" or linking habitats. Reasons for the inclusion of such apparently-less-important areas will be made clear at the time of designation.

Rationale

The designation of KWS with non-contiguous features is rare, but may be appropriate for such habitats as closely-related groups of ponds, or clusters of veteran trees, in otherwise-improved farmland. This is particularly the case where they, as a group, contribute jointly to the survival of more mobile species in the area. It is recognised that these fragments can be more vulnerable than larger sites, and that linking "corridors" may form an important part of their conservation. Because of this, fragile features are likely to require some less-important fringing and/or linking habitats within a KWS boundary.

The degree of fragility of some KWS features may not immediately be apparent. For example, rough grassland may look resilient to grazing or mowing, but support invertebrate populations which are highly vulnerable to damage or destruction (including through well-meaning conservation management aimed at optimising botanical features). Thus the invertebrate diversity of a site may be fragile and vulnerable, and management recommendations should reflect this.

Whilst it is important to conserve the county's most fragile habitats and vulnerable species, there is always a danger of causing damage simply by visiting the site. It is therefore appropriate to include a full assessment of site vulnerability, including susceptibility to visitor pressure, in the management section of the KWS Assessment Sheet.

"Nest" site of an oystercatcher, shortly after hatching.
Populations of ground-nesting birds are often very vulnerable to damage and disturbance, requiring careful timing of survey, monitoring and management activities.

6 Recorded history and cultural associations

a. the nature conservation interest of the site is dependent on a rare or unique combination of historical factors such as long-term land use and management patterns
b. the habitats and species present have become established over a very long period of time and consequently represent a limited resource in the county, as they could not be replaced or substituted
c. The site is a particularly good example of the positive influence of long-established cultural practice on biodiversity
d. the site in question has exceptional potential for education and/or public appreciation of nature due to its longstanding recorded history

Principles for selection on the grounds of recorded history and cultural associations
When considering whether to select a KWS on the basis of its recorded history and cultural associations, particular consideration will be given to the typicalness of the site as a Gloucestershire habitat, eg. Flood meadows, traditional orchards.

Rationale
Habitats with a long history of association with the county are particularly likely to benefit from recorded history and cultural associations, as they provide a direct link to the factors which made those habitats distinctive in a local context.

7 Wildlife corridors and other connected habitats

a. the site forms part of an important, larger ecological unit which would be reduced in value as a whole if the site was damaged or destroyed
b. the site forms a vital part of a sequence of habitats all of which are required in order to conserve a key population of an important species (e.g. semi-aquatic invertebrates)
c. The site contributes significantly to a landscape-scale "corridor" of habitat(s) to enable species to adapt/move in response to climate change

Principles for selection on the grounds of wildlife corridors and connected habitats
Special consideration will be given to situations where a collection of habitats forms part of a landscape-scale corridor or progression of habitats typical of the county. This includes sites that link fragmented habitats, and sites in areas such as floodplains where species tend to rely on movement and adaptation for their long-term survival.

When considering the importance of a site for landscape connectivity, Gloucestershire's Strategic Nature Areas (Nature Map), Landscape Character Areas (where applicable), Natural Areas and National Character Areas will all be taken into consideration.

Rationale

Whilst KWS can be selected on the basis of one important feature, they can also contain several different important habitats and features. This is vital for the conservation of species which are dependent on the presence of several interrelated habitat types, e.g. invertebrates which have both aquatic and terrestrial life stages, and species using marginal habitats. It is also important in the Gloucestershire context, where large, homogeneous sites are rare, and the majority of semi-natural vegetation consists of a mix of different but interrelated habitats. Therefore, although most habitat types have special-case selection criteria which are enough to justify selection in their own right (eg. large areas of limestone grassland), each habitat will also be considered in the light of other, complementary site features.

Where there are "gaps" in habitat cover associated with a particular Strategic Nature Area, a site may be of special usefulness for the species typical of that area, even if it does not itself contain much that is rare or vulnerable. It would be a mistake to leave such sites out of the KWS system, due to their importance for the adaptability and survival of species. This is especially important in the context of climate change, which may force some species further along their natural range in order to survive the changing suitability of the environment.

8 Value for appreciation of nature

a. Three or more of the following factors apply:

- The site is adjacent to, or overlooked by, a residential area
- There are well-used footpaths/cycleways/bridleways providing access to the site (official or permissive)
- The site and its features of interest are accessible to people who are physically disabled
- There is space to park at, or within easy walking distance of, the site
- There is a local 'friends' type group concerned with beneficial conservation management on the site
- The site is used by community groups

b. There is a well-established history of community involvement with positive nature conservation management of the site

Principles for selection on the grounds of value for appreciation of nature

A KWS may be selected purely because it is an excellent example of a place which is highly valued for its natural appeal, leading to greater appreciation of biodiversity and a high level of support for its conservation and ehancement.

Such sites will not be selected purely on "accessibility" grounds where there is an unavoidable likelihood of human activities damaging the biodiversity on the site.

A site which is otherwise a good candidate for KWS selection may be **less** suitable as a KWS due to very heavy use by members of the public who value the site for very different reasons. In such cases, the site may benefit from designation as a KWS, but should be designated only where there is a way of addressing problems in a positive manner. All such factors should be detailed on the site Assessment Sheet for the Selection Panel to consider.

Accessible Key Wildlife Sites – such as this public footpath through a woodland carpeted with wild daffodils – are often the only places where members of the public can encounter wildlife, throughout the seasons, within easy reach of where they live

Rationale

People value wildlife sites for reasons other than their scientific importance for biodiversity conservation. It may be an attractive area to walk, or for a picnic, or it may provide a view from a window, or it could have a local historical association. These activities all provide opportunities for appreciation of nature whilst they are carried out on a diverse site with thriving, attractive habitats and species. The appeal of such sites increases public advocacy for wildlife, and contributes to the quality of life of those living nearby. If such a site is damaged, whilst the dismay of users may be on aesthetic rather than biodiversity grounds, the fact that the site is known and valued still serves to further the cause of mending the damage, spreading the word about the nature conservation interest on the site, and taking protective measures in future.

9 Value for learning

a. the site provides the best or only Gloucestershire example of a situation where a threatened or declining habitat or species of high nature conservation interest for which there is a research need may effectively be studied
b. the site has one or more features of nature conservation importance that would not ordinarily qualify for KWS or SSSI selection, but which are known to be declining or having to adapt due to factors which cannot be prevented, and for which research over the medium or long term is crucial for the success of conservation efforts elsewhere
c. the site is exceptionally well-placed to offer educational opportunities either by its proximity to a school or other place of learning, or its easy accessibility for study of the species and habitats present without causing unacceptable damage or disturbance

Principles for selection on the grounds of value for learning

KWS may be selected purely on the grounds of excellence for the understanding of biodiversity, even where other criteria are not met.

Where there is a potential for disturbance to wildlife but also a high potential for educational value, an effort should be made to designate the site as a KWS in conjunction with site users, so that risks to biodiversity can be reduced whilst keeping the educational benefits.

Rationale

Since the publication of the Ratcliffe criteria, which did not include educational value as a criterion for selection of protected sites (see Part 1), the importance of education for the benefit and enjoyment of biodiversity has been given greater recognition. DEFRA guidelines for selection of Local Sites make a point of including value for learning, on the understanding that awareness of biodiversity is highly beneficial for the future of local habitats and species in both the short and long term.

2.2 Using the Criteria

The checklist of general site criteria is applicable to each site under consideration. Sites which fulfil at least one of these criteria will be selected as KWS. The detailed, minimum thresholds for selection on the grounds of a particular habitat or species should be used as a guide to whether one or more of the general criteria have been met; note that sites will not necessarily be selected just because they meet the minimum habitat or species requirement (see **2.5**, below).

In order to meet criteria which require "exceptional" or "excellent" quality, the features in question should be recognised by the selection panel as outstanding within the county context. As a broad guide, an excellent site is likely to be in at least the top ten percent of its class. Exceptional sites should be unanimously agreed upon as a best example in the county context.

2.3 Choosing KWS boundaries

Well-defined boundaries are crucial to the success of any network of protected sites. In defining KWS boundaries there are two potentially conflicting considerations:

1. The boundary should be the minimum necessary –
   a) to avoid unnecessary restrictions on land owners;
   b) to maintain the site integrity and high standards of the Key Wildlife Site system;

2. At the same time the boundary must be large enough to protect the site adequately, by ensuring that all the important features are included and that an appropriate conservation management regime can be maintained.

In defining boundaries it should be possible to explain to individual landowners why their land is included in the site while other lands are not. The KWS selection panel should therefore be able to agree that, on balance, a consistent, logical and methodical approach to defining site boundaries has been employed. Boundaries must be clearly indicated on a map, showing any hedges, streams or other linear features which are considered to be part of the designation. Other semi-natural habitats will be also be included where they are considered vital for the survival of the key ecological features for which the site has been selected. This might include:

- crucial feeding areas for a rare species;
- linking habitats, without which the site would be threatened by fragmentation;
- hydrological features on which the habitat depends, or
- other less-diverse habitats without which the most important habitats and species on a KWS could not be adequately conserved.

Whatever the site includes, the position of the boundaries should be clear both on the map and in the field, with existing recognisable field and management boundaries used wherever possible.

2.4 Making the assessment

In order to evaluate a site based on the standard survey information, and incorporating the criteria above, an Assessment Sheet should be filled in, showing the surveyors' interpretation of habitat classification, quality and structure, and how the site fits the Criteria. This is to ensure a consistent approach of appraisal for each site, minimising subjectivity. Completed Assessment Sheets should be presented to the Site Selection Panel.

A fully-worked example of a KWS Assessment Sheet is shown in Appendix 1[1].

[1] With acknowledgements to Berks, Bucks & Oxon Wildlife Trust: *Local Wildlife Sites Criteria* (BBOWT, 2008)

2.5 Minimum habitat selection thresholds

All sites should fulfil at least one of the criteria in the Checklist of General Key Wildlife Site Criteria in Section 2.1. The following minimum habitat selection thresholds should be used as a guide to whether a site fulfils the general criteria or not, and as a guide to site assessment. In the case of manmade or complicated habitats, extra guidance is included such as checklists of features and indicator species. Habitats which are crucially associated with a particular key species are given their own section, as these categories may override the usual minimum thresholds.

This section is arranged into common habitat types for ease of reference. However, the selection process takes into account the importance of mosaic habitat communities, including examples of natural zonation of successional stages in vegetation development, and valuable mixed habitat corridors, as well as good examples of individual habitats.

Some habitat selection thresholds depend on lists of **indicator plant species**. Where these occur on **Table S1a** of **Appendix 3** (i.e. they are vascular plants of high conservation concern in Gloucestershire) they are marked with an **asterisk***. Species on **Table S1b** (e.g. vascular plants with 10% or more of their English hectads in Gloucestershire) they are marked with **two asterisks****. Some may be on both lists.

Important note:
A site will be selected if the Selection Panel deems that it fulfils at least one of the general criteria for site selection in Section 2.1, **not** just because it fulfils the minimum threshold. **Sites which only support habitats with features that do not meet the minimum thresholds below will not normally be selected as KWS unless other factors – such as value for learning or nature appreciation – are particularly well-represented.**

H1 Woodland and scrub

Related Priority Habitats:
Lowland mixed deciduous woodland
Lowland beech and yew woodland
Wet woodland
Scrub (Local Priority)
Veteran trees (Local Priority)
Green infrastructure (Local Priority)

In view of the Report findings, Traditional orchards were added to the list of Priority Habitats. This is particularly significant for Gloucestershire, which has a large number of traditional orchards associated with its cultural history and locally distinctive landscape as well as biodiversity.

Where an orchard is surrounded by a hedge, H12.7 – special habitat for White-letter hairstreaks – may also apply.

H5 Grassland

Related Priority Habitats:
Lowland Dry Acid Grassland
Lowland Calcareous Grassland
Lowland Meadows
Coastal and Floodplain Grazing Marsh
Purple moor-grass and rush pastures
Marsh (Local Priority)
Road verges (Local Priority)
Urban green space (parks) (Local Priority)
Green infrastructure (Local Priority)
Open mosaic habitats on previously-developed land

H5.1 – All grasslands larger than 0.5 ha which are identified as one or more of the NVC types in Table H5a and which support 15 or more species from Table H5c

Table H5a – High priority grassland types

NVC code	Characteristic species
CG3	*Bromus erectus*
CG4	*Brachypodium pinnatum/rupestre*
CG5	*Bromus erectus – Brachypodium pinnatum/rupestre*
U4	*Festuca ovina – Agrostis capillaris – Galium saxatile*
U5	*Nardus stricta – Galium saxatile*
MG4	*Alopecurus pratensis – Sanguisorba officinalis*
MG5	*Cynosurus cristatus – Centaurea nigra*

H5.2 – Areas of semi-natural grassland larger than 0.5 ha which are identified as one or more of the NVC types in Table H5b and which support 20 or more species from Table H5c

Table H5b – Other Semi-natural grassland types

NVC code	Characteristic species
CG7	*Festuca ovina – Hieracium pilosella – Thymus praecox/pulegioides*
CG10	*Festuca ovina – Agrostis capillaris – Thymus praecox*
U1	*Festuca ovina – Agrostis capillaris – Rumex acetosella*
MG1	*Arrhenatherum elatius*
MG6	*Lolium perenne – Cynosaurus cristatus*
MG9	*Holcus lanatus – Deschampsia caespitosa*
MG10	*Holcus lanatus – Juncus effusus*
MG11	*Festuca rubra – Agrostis stolonifera – Potentilla anserina*
MG12	*Schedonorus arundinaceus*
MG13	*Agrostis stolonifera – Alopecurus geniculatus*

Table H5c – Species occurring on grasslands of high conservation concern in Gloucestershire

Achillea ptarmica	Sneezewort
Agrimonia eupatoria	Agrimony
Aira caryophyllea	Silvery hair-grass
Aira praecox	Early hair-grass
Alchemilla sp.	Lady's mantle
Anacamptis morio	Green winged orchid
Anacamptis pyramidalis	Pyramidal orchid
Anthyllis vulneraria	Kidney vetch
Aquilegia vulgaris	Columbine
Arabis hirsuta	Hairy rock-cress
Asperula cynanchica	Squinancy wort
Astragalus danicus	Purple milkvetch
Astragalus glycyphyllos	Wild licorice
Betonica officinalis	Betony
Blackstonia perfoliata	Yellow wort
Briza media	Quaking grass
Calluna vulgaris	Ling
Caltha palustris	Marsh marigold

Campanula glomerata	Clustered bellflower
Campanula rotundifolia	Harebell
Carduus nutans	Musk thistle
Carex binervis	Green-ribbed sedge
Carex caryophyllea	Spring sedge
Carex demissa	Common yellow-sedge
Carex disticha	Brown sedge
Carex distans	Distant sedge
Carex echinata	Star sedge
Carex flacca	Glaucous sedge
*Carex humilis**	Dwarf sedge
Carex lepidocarpa	Long-stalked yellow-sedge
Carex leporina	Oval sedge
Carex nigra	Common sedge
Carex pallescens	Pale sedge
Carex panicea	Carnation sedge
Carex pilulifera	Pill sedge
Carex pulicaris	Flea sedge
Carex spicata	Spiked sedge
Carlina vulgaris	Carline thistle
Centaurea nigra	Lesser knapweed
Centaurea scabiosa	Greater knapweed
Centaurium erythraea	Common centaury
Cirsium acaule	Stemless thistle
Cirsium dissectum	Meadow thistle
Cirsium eriophorum	Woolly thistle
*Clinopodium acinos**	Basil-thyme
Clinopodium vulgare	Wild basil
*Coeloglossum viride**	Frog orchid
*Colchicum autumnale***	Meadow saffron
Conopodium majus	Pignut
Cynoglossum officinale	Hound's-tongue
Dactylorhiza fuchsii	Common spotted-orchid
Dactylorhiza praetermissa	Southern marsh orchid
Danthonia decumbens	Heath grass
Deschampsia flexuosa	Wavy hair grass
Desmazeria rigida	Fern-grass
Echium vulgare	Viper's bugloss
Eleocharis palustris	Common spike-rush

Eleocharis uniglumis	Slender spike-rush
Epipactis helleborine	Broad-leaved helleborine
Epipactis palustris	Marsh helleborine
Erica cinerea	Bell heather
Erica tetralix	Cross-leaved heath
Erigeron acris	Blue fleabane
Euphrasia sp.	Eyebright
Filipendula ulmaria	Meadowsweet
Filipendula vulgaris	Dropwort
Fragaria vesca	Wild strawberry
*Fritillaria meleagris**	Fritillary
Galium palustre	Marsh bedstraw
Galium saxatile	Heath bedstraw
Galium verum	Lady's bedstraw
Genista anglica	Petty whin
Genista tinctoria	Dyer's greenweed
Gentianella aramella	Autumn gentian
Geranium columbinum	Long-stalked crane's bill
Geranium pratense	Meadow crane's bill
Geranium sanguineum	Bloody cranesbill
Gymnadenia conopsea s.l.	Fragrant orchid
Helianthemum nummularium	Rock rose
Avenula pubescens	Downy oat grass
Avenula pratensis	Meadow oat grass
*Herminium monorchis**	Musk orchid
Hieracium pilosella	Mouse-ear hawkweed
Hippocrepis comosa	Horseshoe vetch
Hyacinthoides non-scripta	Bluebell
Hypericum humifusum	Trailing St. Johns wort
Hypericum pulchrum	Slender St Johns wort
Hypochoeris radicata	Cat's ear
Inula conyza	Ploughman's spikenard
Isolepis setacea	Bristle club rush
Knautia arvensis	Field scabious
Koeleria macrantha	Crested hair-grass
Lathyrus linifolius	Bitter vetch
Lathyrus nissolia	Grass vetchling
Lathyrus pratensis	Meadow vetchling
Leontodon hispidus	Rough hawkbit

Leucanthemum vulgare	Oxeye daisy
Linum catharticum	Fairy flax
Lotus corniculatus	Common birds foot trefoil
Lotus pedunculatus	Greater birds foot trefoil
Luzula campestris	Field wood-rush
Luzula multiflora	Heath wood-rush
Lysimachia nummularia	Creeping Jenny
Microthlaspi perfoliatum	Cotswold penny-cress
Molinia caerulea	Purple moor-grass
Myosotis ramosissima	Early forget-me-not
Narcissus pseudonarcissus	Wild daffodil
Nardus stricta	Mat-grass
Neottia ovata	Twayblade
*Oenanthe fistulosa**	Tubular water-dropwort
Oenanthe pimpinelloides	Corky fruited water-dropwort
*Oenanthe silaifolia**	Narrow-leaved water-dropwort
Ononis repens	Common restharrow
Ononis spinosa	Spiny restharrow
Ophioglossum vulgatum	Adder's tongue
Ophrys apifera	Bee orchid
*Ophrys insectifera**	Fly orchid
*Orchis anthropophora**	Man orchid
Orchis mascula	Early purple orchid
Origanum vulgare	Marjoram
Ornithopus perpusillus	Birds foot
Pedicularis sylvatica	Lousewort
Persicaria bistorta	Bistort
Persicaria hydropiper	Water-pepper
Persicaria minor	Lesser water-pepper
*Persicaria mitis**	Tasteless water-pepper
Picris hieraciodes	Hawkweed oxtongue
Pimpinella saxifraga	Burnet saxifrage
Plantago media	Hoary plantain
Plantanthera bifolia	Lesser butterfly orchid
Plantanthera chlorantha	Greater butterfly orchid
*Polygala calcarea***	Chalk milkwort
Polygala serpyllifolia	Heath milkwort
Polygala vulgaris	Common milkwort
Poterium sanguisorba	Salad burnet

Potentilla anglica	Trailing tormentil
Potentilla erecta	Tormentil
Potentilla sterilis	Barren strawberry
Primula veris	Cowslip
Primula vulgaris	Primrose
Pulicaria dysenterica	Fleabane
Ranunculus bulbosus	Bulbous buttercup
Rhinanthus minor	Hay rattle
Rumex acetosella	Sheep's sorrel
Sanguisorba officinalis	Greater burnet
Saxifraga granulata	Meadow saxifrage
Saxifraga tridactylites	Rue-leaved saxifrage
Scabiosa columbaria	Small scabious
Scorzoneroides autumnalis	Autumn hawkbit
Scutellaria minor	Lesser skullcap
Serratula tinctoria	Saw-wort
Silaum silaus	Pepper saxifrage
Silene flos-cuculi	Ragged robin
Spiranthes spiralis	Autumn lady's tresses
Stellaria graminea	Lesser stitchwort
Succisa pratensis	Devil's bit scabious
Thalictrum flavum	Common meadow rue
*Thesium humifusum***	Bastard-toadflax
Thymus praecox	Wild thyme
Thymus pulegioides	Large thyme
Tragopogon pratense	Goat's beard
Trifolium fragiferum	Strawberry clover
Trifolium medium	Zigzag clover
Trifolium scabrum	Rough clover
Trifolium striatum	Knotted clover
Trisetum flavescens	Yellow oat-grass
Ulex gallii	Western gorse
Vaccinium myrtillus	Bilberry
Valeriana dioica	Marsh valerian
Valeriana officinalis	Common valerian
Verbena officinalis	Vervain
Veronica officinalis	Heath speedwell
Veronica scutellata	Marsh speedwell
Viola hirta	Hairy violet

Viola riviniana	Common dog violet
Wahlenbergia hederacea	Ivy-leaved bellflower

H5.3 – All semi-natural grasslands below 0.5ha which fit the description for H5.1 or

H5.2 where they occur in connection with other qualifying habitats, either as a mosaic or as an adjacent patch.

Rationale: semi-natural grasslands are among the more vulnerable habitats in the county, and are known to have suffered huge declines nationally. Semi-natural grasslands within a lowland farmland context tend to be fragmented into small areas that escape agricultural improvement or ploughing. Such fragments may play a part in the adaptation of species to changing environmental conditions, hence they should be included in mixed-habitat KWS even where they fall below the minimum size threshold.

H6 Saltmarsh

Related Priority Habitats:
Coastal saltmarsh
Intertidal mudflats

H6.1 – All saltmarsh over 0.5ha in extent

H6.2 – All saltmarsh, of any area, which is adjacent to a site which qualifies for any other reason

Additional guidance on selecting saltmarsh habitats
Saltmarsh is a very variable habitat which may be defined simply as any vegetation characteristic of land which is subject both to high levels of salinity and wet conditions. It may therefore occur either on the coast or inland on salt-rich sites.

Gloucestershire's saltmarsh is technically coastal rather than inland, but it occurs in estuarine conditions which may be found some distance from the sea due to the long tidal reach of the River Severn. Saltmarsh is often categorised according to zonation along the water's edge, the lowest zone typically having just a few, pioneer species whilst the zone nearest to land may be comparitively species-rich, possibly grading