To Linda Jackson
Coleshill Parish Council
Buckinghamshire
clerk@coleshill.org

Future Nature WTC Ltd
Meadow Farm
Thame Road
Blackthorn
Oxfordshire
OX25 1TW

07519327486
adam.price@futurenaturewtc.org.uk

Dear Linda,

1. Introduction

1.1. Future Nature were commissioned by Katie Horgan, Rough Around the Edges Project Officer, on behalf of Coleshill Parish Council in July 2023 to undertake a preliminary habitat survey of a meadow at Coleshill Common, and advise on any habitat management measures which may be ecologically beneficial.

1.2. The area considered at Coleshill Common comprises grassland approximately 1ha in size, surrounded by woodland at the southern extent of Coleshill village, in turn located south of Amersham town, with an approximate central grid reference of SU 94698 94834. The land use around Coleshill Common includes residential dwellings as part of the village, beyond which lies a mixture of agricultural land and woodland.

2. Field Survey

2.1. The meadow was subject to a preliminary habitat survey[1] on the 21/08/2023 by consultant ecologist Adam Price BSc (Hons), MSc.

2.2. The meadow was found to comprise of two broad sections. The northern half has a generally tall but variable sward height, ranging from pathways at 3-6cm tall to tussocks and patches of tall grass up to 60cm high. The sward is relatively diverse, with at least 9 species per metre squared on average including frequent herbs. Grass species typically include common

[1] The UK Habitat Classification, Habitat Definitions Version 1.1 (2020)

bent grass *Agrostis capillaris*, sheep's fescue *Festuca ovina*, tall fescue *Festuca arundinacea*, Yorkshire Fog *Holcus lanata*, cocksfoot *Dactylis glomerata*, perennial ryegrass *Loilim perenne* and tufted hair grass *Deschampsia cespitosa*. Sedges and rushes are also occasionally present, including species such as sharp-flowered rush *Juncus acutiflorus*, soft rush *Juncus effusus* and hairy sedge *Carex hirta*. Additionally, a dense stand of yellow flag iris *Iris pseudacorus* was noted in the north eastern section, along with a greater frequency of damp tolerant species, whilst reed-canary grass *Phalaris arundinacea* is present in damper areas along the western section.

2.3. The herbs present include a variety of species, such as devil's bit scabious *Succisa pratensis*, bird's foot trefoil *Lotus corniculatus*, self heal *Prunella vulgaris*, violet *Viola sp.*, creeping buttercup *Ranunculus repens*, meadow vetchling *Lathyrus pratensis*, broad-leaved dock *Rumex obtusifolius*, sorrel *Rumex sp.*, meadow buttercup *Ranunculus acris*, common mouse-ear *Cerastium fontanum*, tormentil *Potentilla erecta*, red clover *Trifolium pratense*, ragwort *Senecio jacobaea*, creeping thistle *Cirsium arvense*, willowherb *Epilobum sp.*, red bartsia *Odontites verna*, common knapweed *Centaurea nigra* and comfrey *Symphytum sp.*

2.4. Occasional stands of scrub are also present within the northern section, including species such as bramble *Rubus fruticosus*, dog rose *Rosa canina*, field rose *Rosa arvensis*, willow *Salix sp.*, hawthorn *Crataegus monogyna* and oak *Quercus sp.* seedlings.

2.5. Moving south through the grassland, the sward height transitions to being generally much shorter (beginning approximately in line with the large oak tree), with a dense patch of devil's bit scabious approximately indicating this transition. Within the short-sward area, the species composition is generally similar albeit slightly less diverse, with fescues, Yorkshire fog, common bent, sedges, devil's bit scabious and tormentil remaining frequent. False oat grass was additionally noted within some peripheral areas, whilst moss is also more evidence as a component of the sward.

2.6. Overall the species present generally indicate an acid grassland habitat; it is understood that previous soil testing has confirmed this to be the case. Acid grasslands can have a lower diversity of species within the sward than other types of grassland, albeit are still ecologically valuable habitats.

2.7. Rabbit grazing is evidently occurring, particularly within the short sward areas, whilst meadow anthills are occasionally present throughout the grassland.

2.8. It should be noted that a detailed botanical survey was beyond the scope of this survey, therefore the above species list is not comprehensive.

3. Habitat Management Recommendations

3.1. The grassland represents a botanically valuable habitat, distinct from the surrounding woodland. If left unmanaged, this would transition to scrubland (as evidenced by some stands of scrub already present) and eventually woodland. The primary management objectives in terms of providing ecologically valuable habitat, are to maintain the meadow as open grassland, whilst giving due consideration to the floral diversity, and associated invertebrates and other fauna which utilise this habitat.

Grazing

3.2. The optimal management for grassland habitats such as at this site are often to implement a grazing regime. It is understood that grazing has previously been undertaken at the site, therefore the success of this would need to be taken into account.

3.3. In general, grazing should be light, with cattle tending to provide the best results for wildlife such as invertebrates due to the micro-habitat niches they create (i.e. leaving taller areas around their dung, bare earth). As a general rule, between 0.4 and 0.75 'Live Stock Units' (LSUs) should be introduced per hectare, per annum. The meadow is approximately 1ha in size. Indicative LSUs are set out in Table 1 below. It should be noted that this may need to be adjusted depending on results, particularly given the present of rabbit grazing and likely deer

browsing, and that ideally some areas would be excluded from grazing on a given year (see below text on cutting).

Table 1. Live Stock Units

Grazing Animal	**Livestock Unit**
Dairy Cow	1.0
Beef Cow	0.6
Suckler Cow	1.0
Breeding Ewe	0.15
Horse	1

Cutting

3.4. If grazing is not practicable (and has proven unsuccessful previously), then cutting should continue to be implemented to maintain the meadow's diversity and ecological value.

3.5. *Timing* – the cut should be sensitively timed to allow as many flowers to set seed as possible, and should take place in late-July at the earliest, up to September inclusive. This should be followed either by a second cut in September, or if practicable, aftermath grazing up to February end (see above). This will help prevent a buildup of thatch. The meadow would then ideally be left until July-September the following year, when it would receive another cut.

3.6. The arisings should be removed (i.e. to provide hay) to prevent the build up of nutrients, which will lead to coarse grasses and rank vegetation becoming dominant. Arisings can be left for two days to dry and drop seed before being removed. A small amount of cuttings can however be left on site, which will allow for any invertebrate eggs to remain in situ.

3.7. *Extent* – it is recommended that the meadow is cut on a rotational basis, with some areas being left uncut on any given year. This will provide a refuge for fauna, in particular allowing invertebrates to complete their life cycle (i.e. larvae which develop in seedheads of grasses and

flowers). This could be in the form of leaving a corner of the meadow uncut, patches around scrub stands, or strips (i.e. 2-4m wide) along the edge of the meadow.

3.8. To add further benefit, the height of the cut could be varied across the meadow, the create a variety of sward heights and corresponding habitat niches.

3.9. A number of meadow anthills are present at the site. Inevitably some may get damaged by management activities, however if works are undertaken sensitively and attempts made to avoid directly cutting over the anthills, then any harm can hopefully be minimised.

Scrub Control

3.10. Small stands of scrub are occasionally present within the northern section of taller sward grassland. These add some additional opportunities for fauna, such as sucker growth and brambles which can support hairstreak butterflies, and berries which provide a food source for birds. However if left unmanaged, these would eventually encroach upon the grassland to change the habitat composition and out compete grassland flora.

3.11. Ideally, the grassland should have a total coverage of approximately 5% scrub. Scrub which develops above this amount should be removed between October and March (to avoid the nesting bird season). This can be achieved by hand pulling or cutting.

Invasives / Pernicious Weeds

3.12. No non-native invasive species were noted within the grassland at present. The grassland would ideally be monitored for the presence of such species in order that they can quickly be removed should they occur.

3.13. Pernicious weeds such as common nettle *Urtica diocia*, broad-leaved dock and creeping thistle are occasionally present. These species do have some value for wildlife, such as nettles providing a larval foodplant for charismatic butterfly species including red admiral, comma,

peacock and small tortoiseshell, albeit can overtake a habitat to the detriment of other species, especially if soil nutrient levels become high.

3.14. As was described for scrub above, ideally these species should not cover more than 5% of the grassland habitat. Any excess growth can be managed by cutting to less than 15cm prior to them flowering and setting seed.

Other Inputs

3.15. As a general point, the use of nutrient input, herbicide and fungicide should be avoided.

3.16. If livestock are utilised for grazing, they should not be given supplementary feed where not necessary, to avoid additional nutrient input, and should be kept off site for a minimum of 10 days after any avermectin worm treatments, which can harm the development of insect larvae (slow-release wormers should be avoided entirely).

I trust the above is helpful in deciding on any changes to management practiscs at the grassland meadow at Coleshill Common.

Please let me know should you have any comments or queries.

Yours Sincerely,

Adam Price

Consultant Ecologist

Future Nature WTC