University of Suffolk

Wildflower Meadow

UK Habitat Classification Survey Report

2026

Site name: University of Suffolk Wildflower Meadow

Grid reference: TM696044240

Area: 1,131 M^2

Date and time of the survey: 20th May from 11:47 to 14:05

22nd June from 10:00 to 10:30

Weather conditions: 20th May: overcast, some light rain, slight wind, 16°C

22nd June: partly sunny, slight wind, 21°C

Recorders: Thomas Heathwaite

Location, description, and geology of site:

The site is located on the University of Suffolk campus which is in the centre of Ipswich. Bordering the Bumblebee Buffet Area, to the east, is Alexander Park. Suffolk new college boarders just to the north of the University of Suffolk campus and the marina and Ipswich wet docks are to the south of the University of Suffolk campus. The centre of Ipswich is about 1km from the site campus.

The bedrock geology of the site consists of clay, silt, and sand (the Thanet Formation and Lambeth Group) and the superficial deposits consist of sand and gravel (the Lowestoft formation).

Statuary and Non-statutory designations:

There are no statutory designations within a radius of 1km of the survey site.

Three non-statutory designations are present within a radius of 1km of the survey site including Nitrate Vulnerable Zones 2017 Designations (England), total catchment source protection zone and drinking water protected area (surface water) (DEFRA, 2024)

Habitats and species:

Given the Wildlife Garden is only 230.35 meters away, the finding presented within the 2022 Wildlife Garden Phase 1 Habitat Survey report is likely to be valid here too.

Methodology (terrestrial):

Before the site visit, a desktop survey consisting of 1) the geology of the site; 2) statutory and non-statutory designations and 3) a search using the NBN Atlas (2025) of all protected species recorded within a 1km radius of the survey site listed on the UK Wildlife and Countryside Act (1981), section 41 of the Natural Environment and Rural Communities Act (2006), and *The Conservation of Habitats and Species Regulations 2017* was conducted.

A visit to site was made on the 23rd of May to survey the terrestrial part of the site, with weather conditions overcast, slight wind, 16°C

Plants were surveyed using 1 meter squared quadrats, using standardised sampling (see figure 1). Plant species present in these quadrats were recorded, along with their local frequency in each quadrat. From this, dominant species were noted, as well as abundance and local frequencies. The habitats were mapped as per the (UKHab Ltd, 2023), UK Habitat Classification System, V2.0 methodology. Where habitats were too small to map, target notes were added.

Any species observed throughout the survey period were also noted.

Any species recorded during observations made before the survey in the spring have also been noted; and are indicated as such.

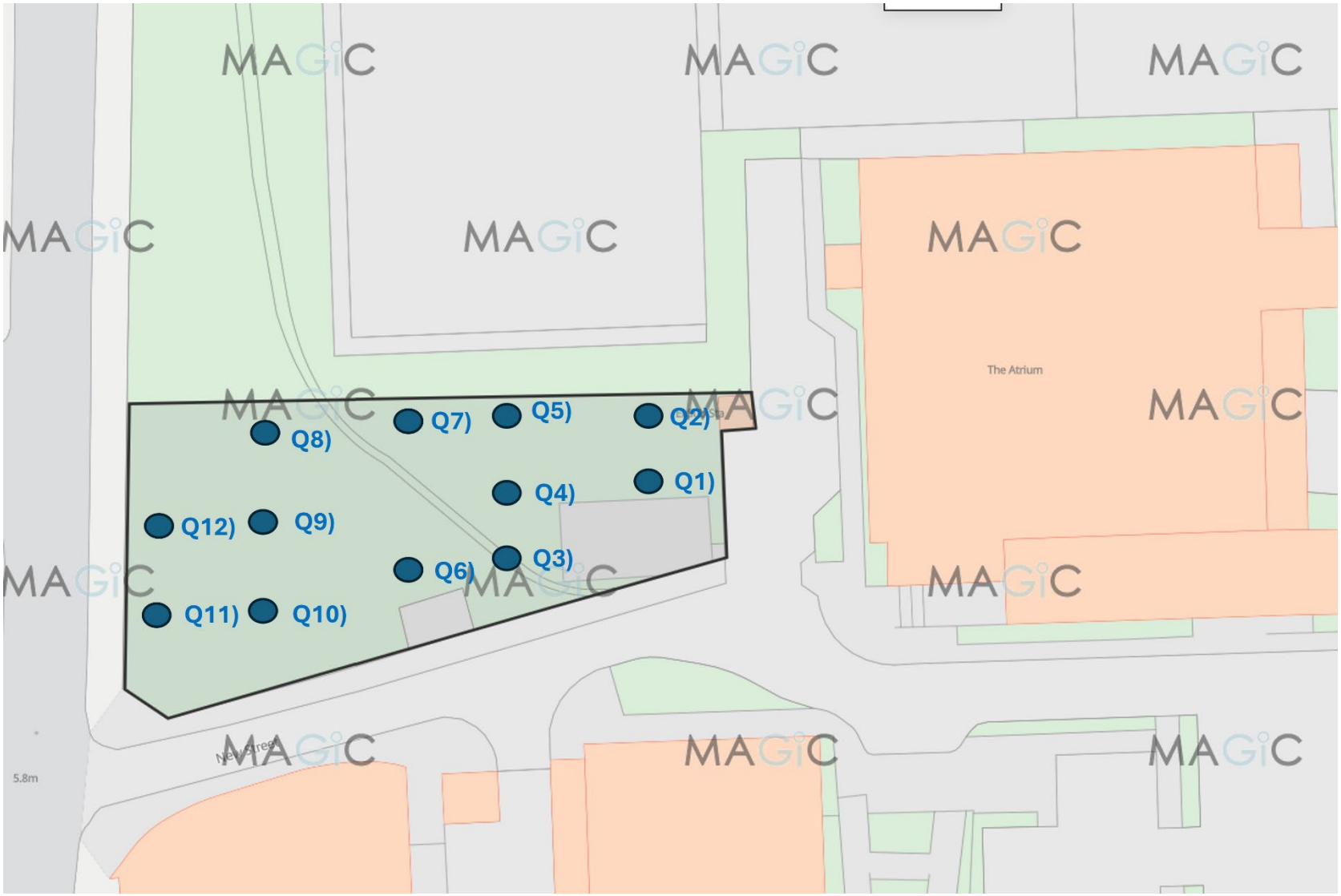


Figure 1, a diagram showing where each quadrat was placed, using systematic sampling. The brown outline indicates the whole sampling site boundary, and the blue dots indicate where the quadrats were laid. Image produced using the Magic Map application (DEFRA, 2024)

Results:

The habitats are described below. Figure 2 shows the habitats and boundaries present at the survey site and their codes. Table 1 shows the target note number, and a description of the target note whilst Table 2 shows the species that were present within the quadrats, their local frequencies and a photo where relevant (Figures 3 to 24).

Total species richness (plants and animals combined) is estimated at 37 species, which is an increase of 15 species compared to the 2025 survey. This figure includes red admiral (*Vanessa Atalanta*), peacock (*Aglais io*) and comma (*Polygonia c-album*) butterflies which have been seen on the meadow during the spring (but not during the survey).

The UK Habitat Classification (UkHab Ltd, 2023) essential secondary codes of relevant for this site are: 33: line of trees and 80: open mosaic habitats on previously developed land.

The UK Habitat Classification (UKHab Ltd, 2023) additional secondary codes of relevance for this site are: 528: walking or cycling route and 814: educational premises open space.

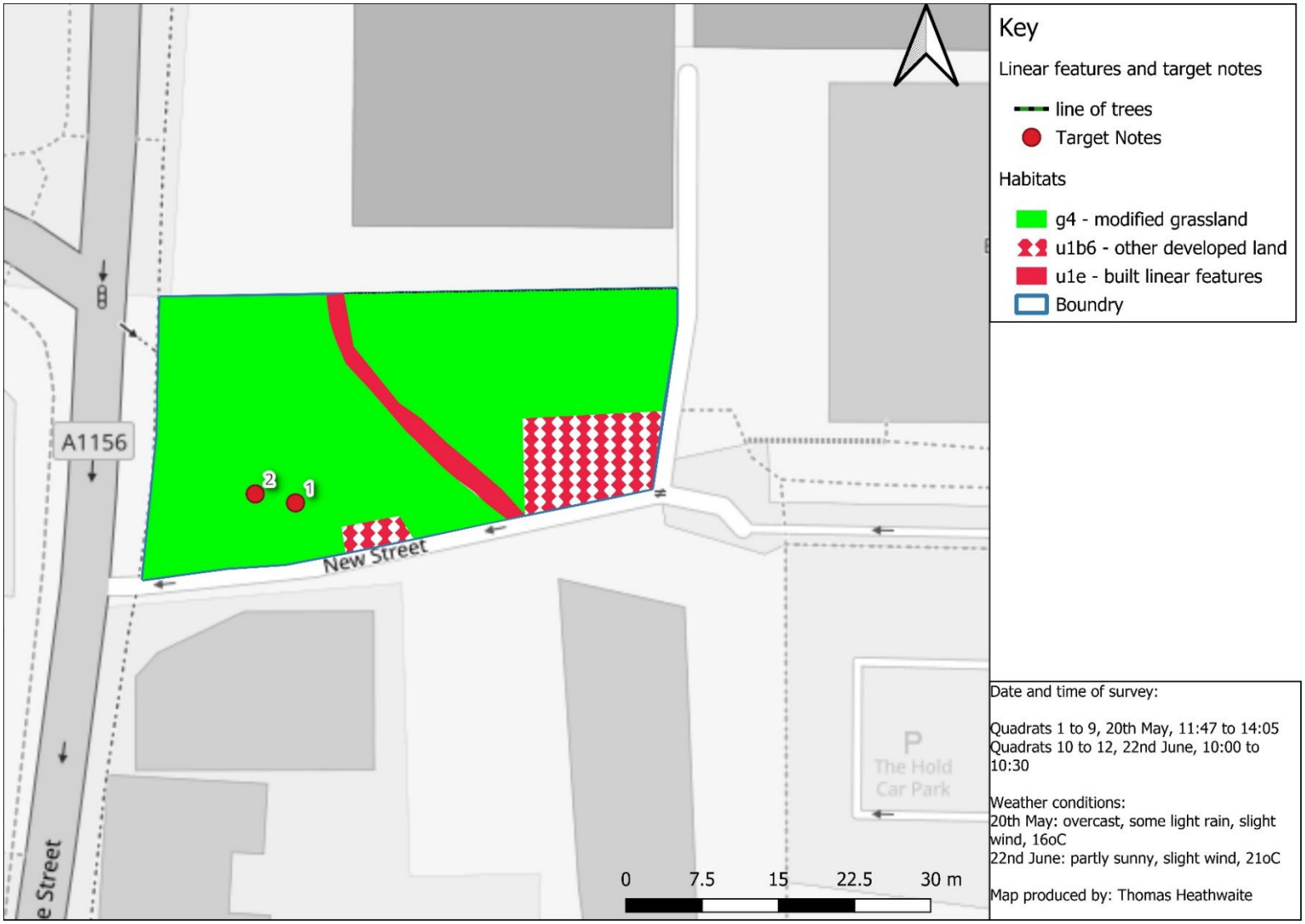


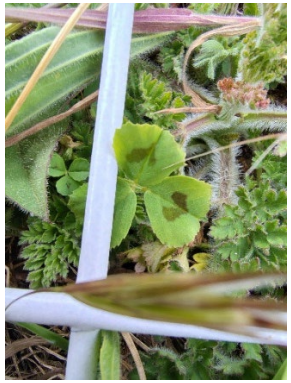
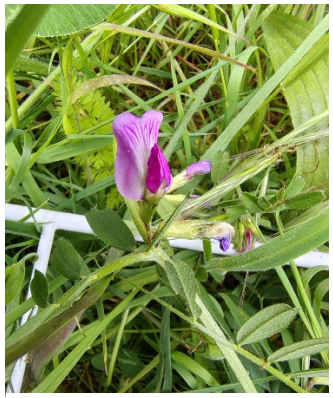
Figure 2, habitat map of the University of Suffolk's Atrium Wildflower Meadow, Ipswich, OS Grid Reference: TM696044240 using the UK Habitat Classification methodology (UKHab Ltd., 2023).

Table 1, a table showing the target note number and description of each target note.

Target note number	Target note description
2	Yellow sweet clover (*Melilotus indicus*) near quadrat 10 just to the right under tree. Also, a meadow buttercup (*Ranunculus acris*) present
3	Some St John's wort (*Hypericum perforatum)* next to quadrat 10, with common corncookle (*Agrostemma githago*) Common carder bee (*Bombus pascuorum*) visited both during the survey period. Next to these are oxeye daisies (*Leucanthemum vulgare*), common yarrow (*A. millefolium*) and both perennial rye grass (*Lolium perenne*) and sweet vernal grass (*A. odoratum*). Red clover (*Trifolium pratense*) is also present.

Results – Plants:

Table 2, a table describing the species found in each quadrat, the local frequency, and a photo if taken.

Quadrat number	Species name and local frequency	Photos?
Q1	$\frac{3}{25} = soft\ brome\ (Bromus\ hordeaceus)$ $\frac{16}{25} = ribwort\ plantain\ (Plantago\ lanceolata)$ $\frac{3}{25} = common\ vetch\ (Vicia\ sativa)$ $\frac{8}{25} = wild\ carrot\ (Daucus\ carota)$ $\frac{12}{25} = spotted\ medick\ (Medicago\ arabica)$ $\frac{2}{25} = red\ clover\ (T.\ pratense)$	 Figure 3, overview of quadrat 1 Figure 4, red clover (*T. pratense*) quadrat 1.  Figure 5, spotted medick (*M. arabica*) present quadrat 1  Figure 6, common vetch (*V. sativa*) quadrat 1

Q2

$$\frac{6}{25} = Red\ clover\ (T.pratense)$$

$$\frac{20}{25} = creeping\ bent\ (Agrostis\ stolonifera)$$

$$\frac{2}{25} = soft\ brome\ (B.hordeaceus)$$

$$\frac{8}{25} = wild\ carrot\ (D.carota)$$

$$\frac{10}{25} = spotted\ medick\ (M.arabica)$$

$$\frac{4}{25} = lesser\ knapweed\ (Centaurea\ nigra)$$

$$\frac{2}{25} = common\ vetch\ (V.\ sativa)$$

Figure 3, overview of quadrat 2.

Q3

$$\frac{8}{25} = common\ mugwort\ (Artemisia\ vulgaris)$$

$$\frac{18}{25} = spotted\ medick\ (M.arabica)$$

$$\frac{8}{25} = lesser\ trefoil\ (Trifolium\ dubium)$$

$$\frac{1}{25} = corn\ chamomile\ (Anthemis\ arvensis)$$

$$\frac{6}{25} = ribwort\ plantain\ (P.lanceolata)$$

$$\frac{7}{25} = greater\ sticthwort\ (Stellaria\ holostea)$$

$$\frac{10}{25} = soft\ brome\ (B.hordeaceus)$$

Figure 8, overview of quadrat 3.

Figure 9, lesser trefoil (*T. dubium*) quadrat 3.

Figure 4, corn chamomile (*A. arvensis*) - quadrat 3 - not how small it is.

Q4

$$\frac{11}{25} = ribwort\ plantain\ (P.lanceolata)$$

$$\frac{9}{25} = soft\ brome\ (B.hordeaceus)$$

$$\frac{1}{25} = oxeye\ daisy\ (L.vulgare)$$

$$\frac{8}{25} = wild\ carrot\ (D.carota)$$

$$\frac{11}{25} = common\ vetch\ (V.\ sativa)$$

$$\frac{1}{25} = smooth\ hawk's\ bread\ (Crepis\ capillaris)$$

Figure 11, an overview of quadrat 4.

Figure 12, common vetch (*V. Sativa*) quadrat 4.

Figure 13, common vetch *(V. sativa*) and ribwort plantain (P. lanceolata) quadrat 4.

Figure 14, big patch of wild carrot (*D. carota*) in quadrat 4.

Figure 15, Growth seem to be stronger at quadrat 4 - the height of these ribwort plantains (*P. lanceolata*) demonstrates that

Q5

$\frac{4}{25} = ribwort\ plantain\ (P.lanceolata)$

$\frac{19}{25} = common\ vetch\ (V.\ sativa)$

$\frac{8}{25} = common\ mugwort\ (A.vulgaris)$

$\frac{2}{25} = oxeye\ daisy\ (L.\ vulgare)$

$\frac{4}{25} = spotted\ medick\ (M.arabica)$

$\frac{1}{25} = wild\ carrot\ (D.carota)$

$\frac{17}{25} = grass\ species\ (unknown).$

Q6

$\frac{14}{25} = soft\ brome\ (B.hordeaceus)$

$\frac{4}{25} = ribwort\ plantain\ (P.lanceolata)$

$\frac{4}{25} = lesser\ knapweed\ (Centaurea\ nigra)$

$\frac{4}{25} = silver\ hair\ grass\ (Aira\ caryophyllea)$

$\frac{7}{25} = common\ vetch\ (V.\ sativa)$

$\frac{2}{25} = wild\ carrot\ (D.carota)$

Q7

$$\frac{17}{25} = soft\ brome\ (B.hordeaceus)$$

$$\frac{5}{25} = lesser\ trefoil\ (T.dubium)$$

$$\frac{3}{25} = ribwort\ plantain\ (P.lanceolata)$$

$$\frac{12}{25} = common\ vetch\ (V.\ sativa)$$

$$\frac{3}{25} = wild\ carrot\ (D.carota)$$

$$\frac{9}{25} = spotted\ medick\ (M.arabica)$$

$$\frac{3}{25} = common\ stork's\ bill\ (Erodium\ cicutarium)$$

Figure 16, an overview of quadrat 7.

Figure 87, Spotted medick *(M. arabica*) with flower quadrat 7

Figure 9, common stock bill (*E. cicutarium*) – quadrat 7.

Q8

$$\frac{5}{25} = orchard\ grass\ (Dactylis\ glomerata)$$

$$\frac{7}{25} = soft\ broom\ (B.hordeaceus)$$

$$\frac{8}{25} = wild\ carrot\ (D.carota)$$

$$\frac{2}{25} = ribwort\ plantain\ (P.lanceolata)$$

$$\frac{3}{25} = Yorkshire\ fog\ (Holcus\ lanatus)$$

Figure 10, an overview of quadrat 8

Q9

$$\frac{2}{25} = soft\ broom\ (B.hordeaceus)$$

$$\frac{3}{25} = common\ vetch\ (V.\ sativa)$$

$$\frac{4}{25} = spotted\ medick\ (M.arabica)$$

$$\frac{12}{25} = wild\ carrot\ (D.carota)$$

Figure 11, an overview of quadrat 9

Q10

$$\frac{1}{25} = sweet\ violet\ (Viola\ odorata)$$

$$\frac{4}{25} = common\ dandelion\ (Taraxacum\ officinale)$$

$$\frac{19}{25} = prennenial\ rye\ grass\ (L.\ perenne)$$

$$\frac{25}{25} = sweet\ vernal\ grass\ (Anthoxanthum\ odoratum)$$

Figure 21, an overview of quadrat 10

Figure 22, sweet violet (*V. odorata*) quadrat 10.

Q11

$$\frac{2}{25} = meadow\ buttercup\ (R.acris)$$

$$\frac{6}{25} = prennenial\ rye\ grass\ (L.perenne)$$

$$\frac{9}{25} = common\ mouse\ ear\ (Cerastium\ fontanum)$$

$$\frac{1}{25} = english\ oak\ (Quercus\ robur)$$

$$\frac{1}{25} = red\ clover\ (T.pratense)$$

$$\frac{25}{25} = meadow\ foxtail\ (Alopecurus\ pratensis)$$

Figure 12, common mouse ear *(C. fontanum)* present.

Q12

$$\frac{6}{25} = Bristly\ oxtounge\ (Helminthotheca\ echioides)$$

$$\frac{16}{25} = poverty\ broom\ (Bromus\ sterilis)$$

$$\frac{1}{25} = \ prennenial\ rye\ grass\ (L.perenne)$$

$$\frac{2}{25} = common\ yarrow\ (Achillea\ millefolium)$$

$$\frac{2}{25} = wild\ carrot\ (D.carota)$$

$$\frac{1}{25} = Bluegrass\ spp?$$

Figure 13, an overview of quadrat 12. Note the large clump of bristly oxtongue (*H. echioides*) present.

Discussion:

The Atrium wildflower meadow is now in its second year after it was retroverted, and despite another very dry and the warmest spring on record (BBC, 2026), the species richness has increased by 14 species compared to the 2025 survey which is encouraging.

Moreover, the results show both wildflower species make up a greater proportion of the species counted and there are more wildflower species in total present (19 out of 37 species for 2026 proportion = 51.4%; 9 out of 22 species in 2025 proportion = 40.9%). Anecdotally, plants also seem to be a bit taller and healthier this year, perhaps helped by the mix of weather of conditions during the winter and early spring. The data suggests further changes as below, as well as what they indicate/ recommendations (where applicable):

- Species such as soft brome (*B. hordeaceus*), perennial ryegrass (*L. perenne*), creeping bent (*A. stolonifera*) all have increased in dominance in this year's results.

  What it means: Whilst grasses are a natural and important component of species-rich wildflower meadows, increasing dominance of competitive grass species will need to be carefully managed as they may outcompete less vigorous wildflower species for light, nutrients and space (Doležal et al., 2019).

- A largely widespread increase in ruderal and early successional forbs, which includes species such as common vetch (*V. sativa*), spotted medick (*M. arabica*) and wild carrot (*D. carota*), suggesting that the meadow is undergoing ecological succession, and not yet reached a natural grassland community.
- Known wildflower meadow indicators such as oxeye daisy (*L. vulgare*) and lesser knapweed (*C. nigra*) are increasing in distribution and dominance compared to last year's data.

Taken together, the results indicate that the meadow is continuing to develop towards a more species-rich grassland community, with increasing wildflower diversity and the emergence of positive indicator species. However, further succession and ongoing management will be required before the habitat develops the floristic composition and structure required for classification as G3 neutral grassland (UKHab Ltd, 2023).

The biggest challenge with this meadow, like with any, is creating the nutrient poor soil that indicator species for the G3 natural grassland classification need (UKHab Ltd, 2023). However, the variation in vegetation composition across the site suggests that ecological differentiation is beginning to occur, with some areas appearing more favourable to species-rich grassland communities than others:

- Quadrats 3, 4 and 7 show greater diversity including a greater mix of legumes and forbs
- Quadrats 10, 11 and 12 showing many ruderal species present such as bristly oxtongue (*H. echioides*), and poverty brome (*B. sterilis*), and Sweet vernal grass (*A. odoratum*) which indicates more nutrient-rich soils conditions which favour competitive species.

Recommendations:

The following recommendations will help to reduce fertility, increase forbs diversity (needed to achieve the G3 natural grassland classification (UKHab Ltd, 2023)), and stabilise meadow structure.

1. In localised, grass dominated patches, such as quadrat 10, scarify or rotovate and re seed with meadow appropriate species such as knapweed (*C. nigra*), bird's foot trefoil (*L. corniculatus*), and devil's bit scabious *(Succisa pratensis*).
2. Improve the structural diversity, by creating variation in sward height through partial cutting or rotational refuge areas, whilst retaining some uncut patches for invertebrates over winter. This creates many micro habitats which will sustain more biodiversity.
3. If possible and practical, control species such as Bristly oxtongue (*H. echiodes*) and poverty brome (*B. sterilis*) by hand pulling where feasible and removal before setting seed. These species are likely to require the greatest management input if their abundance continues to increase.

Limitations:

There is the limitation of survey effort which may mean that the actual species richness may be higher than found. This will always be a limitation of all surveys.

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