Mike's Meadow
Vale Landscape Heritage Trust
Worcestershire

Yellow dots and numbers refer to locations and numbers of quadrats recorded in 2022.

Site Name Mike's Meadow	**Grid Ref** Ox SP068473 SD SP069477	**County** Worcestershire	
River Severn catchment	**Ownership** Vale Landscape Heritage Trust	**Designation** None	**Size (ha)** 1.6 ha
Date 28/06/2022	**Meeting with** Vale Landscape Heritage Trust	**Managed by** VLHT	
Management and History			
This site was bought by the VLHT in 2013. Prior to that it had been heavily grazed by horses until 2007, at which point it was abandoned. The horses were some miniature ponies and others, although the VLHT are not sure of the grazing intensity. In spring 2014, the Trust carried out a close cut and then allowed it to grow for hay. The hay was then cut that year in July. Since then the hay has been cut most years and aftermath grazed by sheep. They aim for a hay cut late June.			

In 2021 they hay cut was missed as they were planning to use it as a source of green hay for a nearby meadow, but the contractor didn't manage to come in the end.	
Agri environment agreement	
Restoration	
Technique used/Dates	
The change in management following many years of intensive horse and pony grazing has been the main focus for restoration. The VLHT bought the site to protect the old hay meadow and plan to manage it to maximise its floodplain meadow diversity. The driver is for nature conservation. The VLHT manage a substantial number of sites across the Vale, bought for protection and conservation.	
Hydrology Flooding regime Water management Soil-water levels (indicated by auger hole/any other data)	The site does flood most winters, and drains quite quickly.
Current site interest	Attach excel spreadsheet for botanical data
A botanical survey was carried out on five 1 x 1 m quadrats across the meadow in July 2022. Vegetation in the meadow is dominated by false oat-grass *Arrhenatherum elatius* and red fescue *Festuca rubra*, with a high cover of lady's bedstraw *Galium verum*. Species richness is not very high, with an average of 13 species per $1m^2$. The current vegetation was most similar to the NVC communities MG9b Tufted hair-grass pasture *Holcus lanatus - Deschampsia cespitosa*, and MG4c, Burnet floodplain Creeping bent sub-community *Alopecurus pratensis-Sanguisorba officinalis Agrostis stolonifera* sub-community, however the similarity score in MAVIS is low (50%) and therefore not particularly conclusive. Several good meadow herbs like common knapweed *Centaurea nigra*, meadow vetchling *Lathyrus pratensis*, pepper-saxifrage *Silaum silaus,* and bird's-foot-trefoil *Lotus corniculatus* are well established in the field. However, the high presence of cow parsley *Anthriscus sylvestris* in places, reflects some lack of management (most likely the missed hay cut in 2021). Ellenberg indicator scores (Table 1) suggest the field has a well-balanced level of soil nutrients and moisture, and offers good conditions for meadow restoration by application of more seed propagules through green hay or seed application. However, the proportion of competitive species is still high in the ratio of functional types in vegetation (Table 2). Whilst Mike's Meadow has a relatively low diversity, it qualifies as Priority Habitat Lowland Meadows Condition A.	
Phosphorus levels	Not known.

Soil profiles
Not taken.
Management recommendations
The field has very good potential to accommodate a more species rich plant community. A second hay cut in the autumn if possible, will help to reduce bulk and thatch. Sowing yellow rattle *Rhinanthus minor* will reduce the vigour of red fescue in particular, which will reduce thatch further. Plug planting great burnet would be the quickest way of helping this species to re-establish in the field. It is recommended to submit the Mike's Meadow (if not already) to the PHI team at Natural England HabitatInventories@naturalengland.org.uk if you want to include it for future Stewardship applications. Send this report with the botanical datasheet attached to the above email address.

Table 1. Summary of the botanical data collected.

	Mikes Meadow
Ellenberg F (moisture tolerance)	5.12
Ellenberg N (fertility)	4.78
Ellenberg R (Reaction)	6.28
Species/quadrat (mean and range /1 m x 1 m)	14 (11-18)
NVC (top 2 MAVIS subcommunities)	MG9b MG4c

Table 2. Five categories of meadow restoration progress, measured by indicator scales based on species richness, NVC similarity score and ratios of Grime's plant functional types. Adapted from Rothero, Tatarenko & Gowing, 2020.

	Score of success/progress				
Measure	1 Failure	2	3	4	5 Success
Average scores from five botanical quadrats per field. Calculated in MAVIS					
Species richness (number of species per 1 m^2)	<8	8 to 12	13-15	16-20	>20
NVC similarity score	<50%	50-55%	55-60%	>60%	>60%
C:S ratio	1.65	1.39	1.23	1.1	1.09
S:R ratio	0.67	0.79	0.81	0.89	0.93