MANOR VALE MEADOW: FLOWERING PLANT SURVEY 2023

Finches Fork, Manor Vale, Kirkbymoorside. Grid Reference SE 692875

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Summary

For some years volunteers have been managing the meadow at Finches Fork in Manor Vale. It was recently suggested that wild flowers from nurseries remote from the site could be planted, in order to increase diversity in the meadow. To find out whether a planting programme was needed, I offered to carry out a survey over the course of a growing season to establish what flowering plants were already present.

My conclusions are that the meadow already has a rich variety of plants; varying the time of mowing could enhance this richness. I believe that the introduction of new species or genetic strains from outside the area is not advisable.

The Meadow

The meadow at Finches Fork is an irregular strip of unimproved grassland, neutral to calcareous, with its long axis aligned north-south and with an area of about one eighth of a hectare. It slopes gently towards the south west and is bounded by woodland and scrub on three sides. On the fourth (east) side there is a hedge separating the meadow from an arable field.

The soil is turned by moles, and herbivores active in the vicinity include roe deer, brown hares and (probably) field voles. A footpath runs along the western margin, and a public bridleway near the eastern side. The bridleway is in frequent use by dog walkers and others. The margins of the bridleway are maintained by the Town Council by occasional mowing in the summer.

The area of grassland was perhaps five times greater within living memory, extending to the west and north (now covered by hawthorn, elder and bramble scrub, developing into predominantly ash woodland). The area is said to have been used as grazing for farm livestock in the past, supporting evidence being the large population of ribwort plantain present: this plant thrives on ground trampled by hooved animals.

By arrangement with the Town Council, Kirkbymoorside Environment Group under the guidance of Don Davies have been managing the meadow for about ten years. They have been mowing in summer and hedge laying in winter. During this time abundance of some of the less common plants has increased (e.g. early purple orchid) and further encroachment by scrub prevented.

The group has in recent years discarded the newly-mown hay into the woodland and scrub adjoining the meadow. Previously they left the hay lying on the meadow while it dried, and then transported it away from the area. Removing the hay (in either of these ways) is intended to remove nutrients, reducing dominance by some grasses and thereby allowing other plants to flourish. The latter method probably results in greater quantities of seed dropped from the mown plants.

The group mowed the meadow on 16 July this year, leaving some clumps of late-flowering plants: common knapweed and a single clump each of meadowsweet and lady's bedstraw. These clumps enclosed some other late-flowering plants e.g. hairy St John's-wort, yarrow. In some previous years the seed heads of hogweed were removed and destroyed before mowing in order to prevent this plant from becoming dominant, but the practice was not followed this year.

The Survey

Flowering plants (not including grasses) were surveyed at approximately weekly intervals from February to September 2023. Plants were identified mostly with the use of binoculars from the edges of the meadow, to avoid frequent trampling. As a result, some inconspicuous species may have been missed. Names of plants were recorded on the first date they were observed in flower. Woody perennials were recorded only if within the meadow, not if defining the margins.

Abundance (based on subjective impressions in most cases):

- 1 Fewer than 10 individuals
- 2 Scattered, or small patch(es)
- 3 Numerous and widespread, or large patch(es)
- m Restricted to the shaded margins

Date of Survey	Species	English name	Abundance
05/02/23			
27/02/23	Mercurialis perennis	dog's mercury	3 m
13/03/23			
24/03/23	Taraxacum sp	common dandelion	3
	Ficaria verna	lesser celandine	3
03/04/23	Potentilla sterilis	barren strawberry	3
	Primula vulgaris	primrose	2 m
12/04/23	Anemone nemorosa	wood anemone	2 m
19/04/23	Stellaria holostea	greater stitchwort	2 m
02/05/23	Alliaria petiolata	garlic mustard	2 m
	Anthriscus sylvestris	cow parsley	2
	Cruciata laevipes	crosswort	3
	Glechoma hederacea	ground ivy	3
	Luzula campestris	field wood-rush	3
	Orchis mascula	early purple orchid (43 flower spikes)	2
	Plantago lanceolata	ribwort plantain	3
	Primula veris	cowslip	2
	Viola riviniana	common dog violet	2 m
06/05/23	Arum maculatum	wild arum	2 m
	Veronica chamaedrys	germander speedwell	3
13/05/23	Ajuga reptans	bugle	1 m
	Alchemilla sp	lady's mantle	3
	Geranium robertianum	herb-Robert	2 m
	Ranunculus bulbosus	bulbous buttercup	3
	Rumex acetosa	common sorrel	2
17/05/23	Geum x intermedium	water/wood avens hybrid	1 m

24/05/23	Conopodium majus	pignut	2
	Ranunculus acris	meadow buttercup	3
	Trifolium pratense	red clover	2
30/05/23	Cerastium fontanum	common mouse-ear	2
	Galium aparine	cleavers	2 m
	Geum urbanum	wood avens	2 m
	Lotus corniculatus	birds-foot trefoil	2
	Myosotis arvensis	field forget-me-not	2
	Ranunculus repens	creeping buttercup	2
	Sanguisorba minor	salad burnet	2
	Urtica dioica	common nettle	2 m
06/06/23	Heracleum sphondylium	hogweed	3
12/06/23			
19/06/23	Hypericum hirsutum	hairy St John's-wort	2
	Lapsana communis	nipplewort	2
	Rubus fruticosus agg	bramble	2
	Sambucus nigra	elder	1
25/06/23	Achillea millefolium	yarrow	2
	Centaurea nigra	common knapweed	3
	Galium verum	lady's bedstraw	2
	Rumex obtusifolius	broad-leaved dock	1
	Stachys sylvatica	hedge woundwort	2 m
03/07/23	Filipendula ulmaria	meadowsweet	2
	Lathyrus pratensis	meadow vetchling	1
	Medicago lupulina	black medick	1
	Plantago major	greater plantain	2
	Sonchus asper	prickly sowthistle	1
	Trifolium repens	white clover	2
	Dioscorea communis	black bryony	1 m
07/07/23			
13/07/23	Arctium minus	lesser burdock	1 m
21/07/23			
28/07/23			
08/08/23	Campanula rotundifolia	harebell	1
16/08/23			
22/08/23	Knautia arvensis	field scabious	1
	No new flowering plants	observed after 22/08/23	

Conclusions and Suggestions for Future Management

56 species (excluding grasses) were identified, all but one of which flowered during the survey period (see table above). The exception was the perennial *Geranium pratense* (meadow cranesbill): there are two small clumps, which did not flower. This species does flower nearby.

There were no rarities but this kind of diverse meadow is itself uncommon nowadays, fully justifying the Environment Group's work not only by mowing and removing the hay but also by laying the adjoining hedge. Thickening the hedge probably helps to protect the meadow from the effects of intensive agriculture in the adjoining fields (e.g. by intercepting spray drift).

There do not appear to have been significant changes to the species list since Manor Vale was surveyed in the late 1990s*. Without any changes to the present management regime I would expect the meadow to continue to do well, but I have some suggestions for the future as follows.

1. The existing flora could be improved, without any extra work for the volunteers, simply by varying the date of mowing. The meadow is usually mowed in July; mowing early in September, at least in some years, would allow more species to thrive and distribute seed. The Manor Vale Management Plan* recommended late mowing (the plan also recommended mowing only 50% of the grassland in any one year).

Several species are adversely affected by early mowing: some of the plants in the second half of the above table, and some which are unable to flower at present, e.g. meadow cranesbill and the grass *Brachypodium sylvaticum* (false brome). There are a few small tufts of the latter towards the north of the meadow. If this grass (and possibly others) were able to flower and set seed, dominance by just one or two grass species might be further reduced.

- 2. There is scope for mowing and removing hay from another, smaller, patch of grassland further north: at the junction of the bridleway and the public footpath from the the golf club road, near the veteran ash tree. This patch has a good variety of flowering plants but nettles are beginning to dominate. Perhaps consider mowing this area and the main meadow in alternate years?
- 3. The main meadow could be enlarged somewhat: a single stunted elder and brambles within the meadow, and some more of the same two species on the western margin, could be removed without disadvantage. Some shade-loving spring flowers already present would benefit, e.g. bugle, dog violet, wood anemone. Hand tools would suffice. This work could take place when the volunteer group is coppicing elsewhere in the wood in winter.
- 4. I do not recommend the planting or seeding of any remotely-obtained wild plants; it would be a pity to change the distinctive character of the meadow. An alternative might have been to spread seed or newly cut hay from a neighbouring more diverse grassland, but there do not appear to be any such sources nearby.

^{*}Manor Vale Management Plan (1999, revised 2011). Kirkbymoorside Town Council: https://docs.kirkbymoorsidetowncouncil.gov.uk/doku.php/manorvalemanagementplan