



Fig. 1 Summer meadow, site 2

Julie Andrews cavorts through heavenly alpine meadows, the distant tolling of the abbey bells forgotten in her ecstatic union with nature ...

Like Sister Maria, we find a natural resonance in such an idyllic scene, but in fact the majority of wildflower meadows are managed landscapes. Certainly in the British Isles, what we might consider as a natural climax vegetation – the vegetation of an area in a steady state after a process of ecological succession – is more likely to consist of woodland, scrubland or pasture.

Wildflower meadows evolved along with domestication of animals prior to the industrial revolution. Meadows occupied land which was too poor for arable farming. This is a crucial factor in any attempt to establish a meadow today.

Richard Mabey's definition is helpful: 'Strictly speaking, a meadow is an area of grass cut for hay. It is 'shut up' between March and June or July, mown, and then grazed until the following spring. But such places are an agricultural anachronism, and the bulk of grass is now grown in leys, which are regularly ploughed, sown with a single species of high-yield grass and cut for silage in the spring. Outside the network of nature reserves, true hay meadows survive in any numbers only in the Somerset Levels and the Pennine Dales.'¹

Before the widespread use of internal combustion engines, the economy was hay-driven. Around 4.5m tons of hay were produced annually². Since the early 20th century, over 97% of our wildflower-meadow acreage has been lost. This decline,

'The hills are alive...' (with perennial meadows)

Souren Ala

which began with the advent of mechanisation on the farm, became a rout during WWII when to increase food production land was put under the plough.

The traditional agricultural function of wildflower meadows now essentially gone, their ecological contribution stands out more clearly. Study after study shows that wildflower meadows support the greatest density and diversity of wildlife of any of our habitats. Our belated and much overdue understanding of the role which natural biodiversity plays in our own well-being has thrust wildflower meadows to centre stage in landscaping and gardening today.

Apart from ecological benefits, wildflower meadows offer a rich aesthetic reward. They can beautifully soften the boundary of a garden;

¹ Richard Mabey *Flora Britannica*, Sinclair-Stevenson 1996.

² Margaret Pilkington *Wildflower Meadows, Survivors from a Golden Age*, Papadakis 2012.

underpin a picturesque orchard, meandering paths mown through it; or cloak a sunny bank, alive with buzzing insects in summer.

But meadows are not gardens. The old adage of a weed being a plant in the wrong place applies: many meadow species such as sorrel, bird's foot trefoil and grasses would be frowned on in the border, but provide vital support for certain insect species.

There is some confusion between the two main types of meadows, as defined by the plants which make them up: annuals and perennials. Annual meadows which provide an explosion of colour in spring and summer must be re-created from scratch each autumn. They are emphatically not a low-maintenance choice.

Perennial meadows, which are the closest thing we have to traditional hay meadows, are less colourful, but sustainable over many seasons – a lower-maintenance option. While some people are disappointed by their muted colours, others enjoy their more natural, restful character.

Perennial meadows evolve through the seasons and through the years. Plant populations interact, ebb and flow. Each year is different; under certain conditions grasses dominate, or they are kept in check by parasitic yellow rattle. Ox-eye daisies may eclipse other species one year, only to reduce in numbers as competing species gain momentum.



Fig. 2 Site 1 prepared for seeding, including a bird deterrent



Fig. 3 First year: annuals provide ground cover



Figs 4 & 5 Second year: bird's foot trefoil dominates, then wild carrot

Methods to overcome lack of colour include incorporating more colourful annual and biennial seeds or plants in the initial installation; using bulbs; and/or adding plugs. Self-seeding of annuals and biennials into an existing meadow is generally unsuccessful; bulbs and plugs can work well provided they are compatible with the meadow aesthetic. Bulbs in particular can help extend the

season of colour, for example in early spring when meadow plants are not yet in flower.

Case studies

Perennial meadows may be created using one or a combination of methods³, but adequate sun and low soil fertility are always essential. Starting a meadow from seed has the lowest start-up cost, but it is likely to require the most work to get it established.

I include here brief accounts of three meadows made using a variety of wildflower-meadow products.

Site 1 (figs 2–5)

A sloping site, clay over chalk, was prepared in the autumn by spraying off weeds and removing many rugosa roses. After the tilth was prepared, a perennial seed mix was sown, selected for this type of soil⁴. Perennials are often slow to germinate, so a nurse crop, a ‘Cornfield Annual’ mix, was sown at the same time to compete with the inevitable weeds of the first season.

The results in the first growing season were successful, dominated by white and yellow, but a little misleading at first: what I first took to be rather small ox-eye daisies and a perennial yellow anthemis, turned out to be corn chamomile (*Anthemis arvensis*) and corn marigold (*Glebionis segetum*), two of the nurse-crop annuals.



Fig. 6 Site 2 prepared by spraying off existing pasture vegetation



Fig. 7 Rotavating before raking



Fig. 8 Laying Wildflower Border Turf™

³ James Hewetson-Brown *How to Make a Wildflower Meadow: Tried and Tested Methods that Really Work*, Filbert Press 2016.

⁴ Emorsgate Seeds Ltd. The catalogue lists the individual species in each mix.

In the second year bird's foot trefoil (*Lotus corniculatus*) was dominant and, later, wild carrot (*Daucus carota*), both excellent for bees, butterflies and moths, but again rather monotonous in colour. However there was also plenty of foliage, looking like scabious, so a qualified success so far, and promising for next year.

Site 2 (figs 6–11)

An area of rough pasture on sandy soil was prepared by spraying with glyphosate and rotavating. Wildflower Turf™ was laid in December 2014. The first spring was very colourful, with a combination of *Bellis perennis*, *Myosotis* and *Dianthus* varieties including Sweet Williams. Subsequent years have been successful, but predictably the colour variety has decreased, especially in spring.

The meadow has been cut either once in autumn, or twice (in early June and in autumn). Despite one's

reluctance to cut in June, when many of the flowers are just coming, the benefits are significant: the early cut is a bit like a late Chelsea Chop – for most plants flowering will simply be delayed; an open sward, critical for plant health, is maintained; and the collapse of taller species in autumn is largely prevented.

In order to vary and prolong the season of colour, a series of bulbs and plugs were

planted in various parts of the meadow last autumn and we wait with fingers crossed for next year. The bulbs include: *Allium caeruleum*, *A. sphaerocephalon*, *Anemone coronaria* De Caen Group, *Camassia leichtlinii* 'Caerulea', *Scilla* 'mixed', *Crocus speciosus*, *C. tommasinianus*, *Fritillaria meleagris*, *Gladiolus communis* subsp. *byzantinus*, *Scilla bifolia* and *Iris* 'Cantab' (Reticulata). Plugs included:



©Souren Ala

Figs 9 & 10 First spring: *Myosotis* and *Bellis perennis* are dominant. (This was not repeated in subsequent years.)



©Souren Ala

Fig. 10



©Souren Ala

Fig. 11 Summer display includes ox-eye daisies, Sweet Williams and wild carrot. (Sweet Williams have gradually declined.)



Fig. 12 Site 3 prepared by spraying and raking. (No rotavation.) Wildflower Earth product laid in April.



Figs 13 & 15 Annuals add colour



Fig. 14 July

Agapanthus 'Midnight Star', *Campanula latiloba* 'Hidcote Amethyst', *Geranium pratense*, *Knautia macedonica*, *Knautia arvensis*, *Lychnis viscaria*, *Sanguisorba* 'Tanna' and *Verbena bonariensis*.

Site 3 (figs 12–15)

In Spring 2017 a meadow was created using Wildflower

Earth, a product combining proprietary compost and a seed mix⁴. The seeds took 6–8 weeks to fully germinate but results in the first year were very good, particularly as some annuals flowered well. It remains to be seen how colourful it will be next year, but in autumn bulbs were added including *Allium*



Fig. 15

sphaerocephalon, *Camassia cusickii*, *Scilla sardensis*, *Crocus* 'Advance', *Narcissus* 'Falconet' and *N.* 'February Gold'.

I haven't used plug plants recently, as I've found that planting plugs into a fertile pasture without removing the existing vegetation has not been successful. 🌱

Souren Ala was infused with a love of gardening from his mother, though it took him years to become aware of it. He is based in north-west Hampshire, working to create and maintain gardens which both humans and wildlife will enjoy.