



## CREATING A WILDFLOWER MEADOW

### Go wild with wildflowers

Creating a meadow is a fantastic thing to do for wildlife and people. Most of our wildlife will benefit directly or indirectly as a meadow provides food and shelter for insects and invertebrates which in turn is food for other creatures such as birds or hedgehogs.

The autumn is a good time to sow a perennial native meadow (perennial means that the flowers come back year after year without having to be re-sown). It's in fact the ideal time for flowers like yellow rattle, cowslips, primroses that need a frost to ensure germination. So, read on for some hands-on advice on how to establish a meadow.

You will need a bit of patience as establishment of wildflowers can be slow and don't expect too many flowers until the second year, unless you use an annual corn flower mix. The reward is worth waiting for though, and perennial meadows usually get better and better with time given the right management.

The success of a perennial wildflower meadow lies partly in the soil, they will establish best on poorer soils, light subsoils, grits, gravels and limey soils. The trouble for most gardeners is that we need to do exactly the opposite of what we would normally do. We must try and reduce the soil fertility as a rich, fertile soil encourages strong growth of grasses and weed species which will compete with your wildflowers and win!

This is a wildflower meadow which is a mixture of native perennial flowers and grasses.



It is very different ecologically from "Cornfield areas" which are mixtures of annual corn field plants which require the turning over of the soil and re-sowing every year to be successful.

### Preparations

There are two main scenarios:

#### **Sowing into an existing sward or sowing into bare soil:**

You can reduce soil fertility over the years by cutting and removing the grass/hay every year. To prepare your area for sowing, we would recommend you cut the grass very short and scarify the turf by raking hard with a scarifying rake or by using a tractor with a scarifying tool (harrow) if it is a large area. The seeds need to get into contact with the soil in order to germinate.

**Alternatively, if you have a relatively small area, you can remove the turf** and the rich top soil to reveal the subsoil. Use the turf to make a feature elsewhere in the garden or leave it to break down to make perfect loamy soil/compost.



Corn field annuals are different and happy to grow in richer soils, they used to be common 'weeds' growing in and alongside arable fields.

It is essential to get rid of weeds such as docks, thistles and nettles before sowing begins. Time clearing the weeds is time well spent. It is also important to keep hand weeding your meadow as it establishes, in order to tip the balance in favour of your chosen seed mix.

### Check what is already there

Before you start it's worth seeing what you already have. Leave the grass to grow long and see what comes up. Maybe there are already some wild flowers there which you haven't seen as they have always been cut.

If you want to add more, you can do this by over-sowing (usually with a 100% wildflower seed mix i.e. no grasses) into heavily raked / scarified ground where you have a high percentage of exposed soil. Another useful alternative / addition to this approach is planting native 'plug plants' that you have sown from seed or you have bought from a supplier. If you buy plug plants make sure they are grown in peat-free compost.

If there are no wildflowers then you may want to sow seeds that you have preferably sourced locally, either by collecting them yourself (with permission) or sourced from a reputable supplier. Make sure they are native and UK grown. Traditional meadow mixes are 70-80% wild-grasses and 20-30% wildflowers. Remember...fine grasses in meadows are also important for wildlife!

### Starting from scratch

Remove turf and fertile top soil, (usually 5-10cm depth). Meadow species thrive in relatively poor soils, light subsoils, grits, gravels and limey soils.

Dig out the roots of perennial weeds such as thistles, nettles, bind weed and dock carefully. It's important to sort out the weed problem before sowing.

If it is a very weedy site, you may need to spend a season clearing the ground of all weeds before sowing.

Rake over the soil to a fine tilth to create a suitable seedbed. Make sure it is firm by rolling or walking over it.

### Sowing your meadow

It's a good idea to mix your seeds with light coloured (kiln dried) sand to make it easier to see where you have been and get an even spread. Sow by walking up and down systematically scattering seeds as you go.

Walk or roll the patch to ensure seeds are in good contact with soil. Don't cover them with soil. Most wildflower seeds germinate better when exposed to light.

### When can I sow my meadow?

Meadows can be sown in spring (March-April) or autumn (Sept-Nov) depending on the conditions.

Autumn sowing is better for certain species which need a frost to germinate (yellow rattle, cowslips, primroses). Top tip: why not sow in autumn and again in spring. You could also autumn sow some seed as plug plants to add to the meadow in spring.

Remember to mark off the area that you have sown as it needs to be protected from people, birds and cats and dogs.

### Seeds for your meadow

Try to obtain as local meadow seeds as possible (there are some small-scale suppliers around).

You can collect local wild seed if you have permission from the landowner.

Consider using "green hay" from a nearby producer. Contact the Wildlife Trust, National Trust, Wildflower suppliers or BSBI local recorder for more information on local seed availability.

There are different seed mixes for different soil types and it's a good idea to test your soil's pH to find out.

You also need to know if it is sandy, loam, clay or chalk soil when you chose your seeds. If your site is in semi or full shade, you will need a different seed





mix for this. There are seed mixes that include a broad mix of species, which are suited to a range of soil conditions.

### Flowers for your meadow

For perennial wildflower meadows: betony, bird's foot trefoil, common sorrel, cowslip, field scabious, knapweed (common or black), lady's bedstraw, meadow buttercup, meadow cranesbill, musk mallow, ox-eye daisy, primrose, red campion, red clover, ribwort plantain, selfheal, vetches, wild carrot, yarrow, yellow rattle.

Don't expect to see flowers in the first year – most perennials need to grow for at least two years before they are mature enough to flower.

For annual cornfield areas:

Corncockle, cornflower, corn marigold, corn chamomile, corn poppy.

## Management of meadows

### Perennial meadows:

For spring flowering meadows with cowslips, lady's smock, fritillaries, etc. leave to grow and flower from March to late July.

Cut in July and always remove hay. Cut occasionally till October or simply one final cut in October.

For the majority of meadows which are summer flowering with knapweed, field scabious, meadow buttercup etc. cut occasionally in early spring until April and then leave to flower and set seed.

Cut in late August/ Sept and remove hay. Final cut in October, not too short. Leave 6" stubble.

### Top tips

- If you can, leave your cuttings lying for a week so that any seeds can drop before removing the hay.
- Be creative with your management, a meadow with different age structures provides habitat for a greater diversity of species. Leave some areas uncut over winter as they are great for hibernating mammals and insects and provide seeds for birds as well.

- After a few years, your grass will become less vigorous and you will hopefully only need to cut your meadow once a year in late summer.

### Annual corn field areas

Leave until autumn. Remove any perennial weeds such as nettles, thistles, docks.

Pull out all dead flower stalks. Rake soil, create suitable seedbed.

Shake out seeds on the bare soil. Don't cover with soil; simply walk on the soil to push seeds in.

You will need to repeat the above process every year if you want to retain the dominance of corn field species.

### Grazing

If you have a large meadow, consider grazing after cutting with sheep, goats, ponies or cattle. If managed properly, grazing animals can make better quality meadows especially on richer soils.

After cutting, graze lightly until early winter; follow up with a light spring graze in March to the middle of April.

From the middle of April to August leave un-grazed.

Interesting fact: Animal dung is good for beetles and other invertebrates

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For more advice, top tips and ideas to help bring wildlife back to your garden visit our website at [northwaleswildlifetrust.org.uk/wildlife-gardening](http://northwaleswildlifetrust.org.uk/wildlife-gardening)



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