Wildflower Meadows - Commonly Asked Questions

When will I see the flowers?

<u>Spring sowings</u>: you may see some flowers at the end of the first season, especially of vigorous species like Yarrow and Ox-eye Daisy but most species will flower from May onwards in the second year.

<u>Autumn sowings</u>: a little more flowering in the first summer, but again mostly in the second year.

Some species will take longer to establish, for example Cowslip is likely to take and extra year with the first flowering in the third spring. The balance of species may take several years to settle down.

Can I have annuals in a meadow?

Annuals can be sown with perennial meadow species to give colour in the first year but if you are cutting early after sowing to control annual weeds in the first season, you may find that you are cutting down the annuals too. Some may appear in the second year if the perennials are slow to establish. You can add them to an existing meadow by rotovating an area in spring and scattering the seed into the soil. This needs to be repeated each year if you want annuals to continue.

Is high soil fertility a problem?

High fertility favours the vigorous growth of some weed species and of grasses. Most wildflower species do not respond so vigorously to high fertility and so the competition between the grasses and wildflowers is too much in favour of the grasses.

There can also be rather long and thick growth which is not as attractive as an open meadow.

In most cases, the best approach is to sow a mixture and manage it as described in 'Meadow Management', removing cuttings. Over a couple of years, fertility is likely to drop quite quickly and the balance will favour the wildflower species.

An alternative is the removal of topsoil from the site but this is often impractical and frequently unnecessary.

Can Yellow Rattle be used to reduce grass growth?

Yellow Rattle (*Rhinanthus minor*) is a hemi-parasite which photosynthesizes for itself but also parasitizes the roots of some plants, especially grasses. Because it removes nutrients from the grasses, they produce less growth and the balance of competition is changed in favour of the wildflower species in a mixture. Yellow Rattle can also build up in patches and then die out, especially if it the host grasses die out. The bare patches are then open for colonization by wildflowers.



Yellow Rattle seed is often included in mixtures but can also be added to established vegetation, in which case is sown in late autumn (October-November) after some light raking, rotovating or harrowing. Sow at 0.5-1 g/m2 and roll.

Germination occurs in spring and the annuals plant grows and sets seed which can then spread through the meadow area.

Will Yellow Rattle spread to become a problem?

The plant does not readily spread into healthy vigorous grassland as it usually needs some open soil so neighbouring areas managed for hay, silage or lawns are unlikely to be affected. Cutting the plants before they set seed is an effective way to control them.

Can I establish a meadow without removing the existing grass?

This is usually less effective than sowing from a new seed bed but it can work if the vigour of the existing grass can be reduced enough to allow wildflower plants to establish. There are two or three possible methods:

Oversowing: The ground should be harrowed or rotovated robustly to produce open soil and knock back the existing plants. Seed should then be broadcast sown and rolled in.

<u>Slot seeding</u>: Specialist machinery is available to sow in rows into grassland, usually using a herbicide to kill the grass in the row which has been sown. These methods are described in a Rural Development Service Technical Advice Note (no. 29). The DFRA website has the full details.

<u>Yellow Rattle</u>: A third method is to establish Yellow Rattle over a period of several years and use the resulting open areas to sow wildflower seeds. This is a long term approach.

Do I have to plough the land?

If a good seed bed can be created, it is not always necessary to plough.

How deep should I plough?

Usually just to a standard depth of 15-30 cm but there is a deep ploughing or 'inversion ploughing' method which will bury the topsoil and bring subsoil up to the surface making a less fertile and more suitable substrate with fewer weed seeds. This is only possible for large areas.

Can I prepare the land without using herbicides?

Yes, it is best to plough or otherwise bury the top layer an any existing vegetation as deeply as possible.

Are weeds a problem?

High numbers of Dock or Nettle plants can be a problem, although they tend to fade out over a few years as fertility falls with removal of cut material. Spot spraying or digging out of individual plants can help, especially in the first year or two.



Should I add fertilizer?

No.

There are occasional exceptions, for example where subsoil with very few available nutrients results in extremely slow growth of seedlings and there is a need to speed this up, for example to 'green up' a public site.

Do I need a soil test?

Generally a soil test is not needed. It is usually possible to get enough information from the existing and surrounding vegetation, the situation and the history of the site to decide what sort of mixture to choose and how to manage the site.

Can I get organic seed?

Very little wildflower seed is produced organically because of the difficulties of seed production and we do not produce organic seed. If you are in an organic scheme, it is best to consult the certifying authority about this issue.

How long does the seed take to germinate?

Depending on the time of year and weather conditions, it usually take 2-6 weeks for most of the seeds in a mixture to germinate. The best indication is usually to look for the grass seedlings – the wildflowers are generally a little behind and often more difficult to identify so the grasses are a good indication of progress. Some species like Cowslip or Primrose for example will not germinate until they have been in the ground over winter.

How to I get appropriate species for my area?

You can ask for advice from your supplier or check on the Natural History Museum Postcode Plants database at www.nhm.ac.uk/science/projects/fff/index/htm

I have lots of Ox-eye Daisy and not many other flowers in my meadow, what should I do?

This is typical in the first year of a meadow's growth in fertile conditions where one or two species may dominate (especially Ox eye Daisy and Yarrow). With the management described above, these species will reach a better balance with the other plants after anther year or two.

Can I store the seed?

If you have excess seed, in most cases it will store for up to a year if you keep it in cool dry conditions. A cool, airy garden shed should be alright. Inside a house is not so good.

