

How to create a Community Meadow

choosing your site

There are many types of wildflower-rich grasslands, including lowland hay meadows and pastures on deep neutral soils, flower-rich swards on the thin calcareous soils of the chalk and limestone landscapes and more acidic grasslands often found alongside lowland heathland areas. All these types of grassland are important and will provide food and habitat for their own distinct group of insects.

Wildflower sites can take time to establish, so you should be sure that the land on which you are creating your meadow can remain managed as a meadow for the foreseeable future. If you have received funding to create your meadow, the duration of the meadow's existence may form a part of your grant conditions.

There is no need to seed or plant into sites which already have lots of different species or other important habitats.

See our Plants for pollinators section for ideas on species to choose for your meadow

Things to consider:

Who owns the land where the community meadow will be?

How will we fund the community meadow?

What long-term management will be needed for the community meadow?

What equipment will we need to create and manage the meadow

What manpower do we have and what will we need?

What type of soil do we have?

What sort of seed or plants should we get?

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Further information & help

There are a number of wildlife organisations that can help and advise on how to create your meadow. Organisations you might like to contact include:

Buglife
www.buglife.org.uk

Flora Locale
www.floralocale.org

Landlife
www.wildflower.co.uk

Plantlife
www.plantlife.org.uk

Butterfly Conservation
www.butterfly-conservation.org

Bumblebee Conservation Trust
www.bumblebeeconservation.org

Your local Wildlife Trust
www.wildlifetrusts.org/your-local-trust

The Conservation Volunteers (TCV)
www.tcv.org.uk

Natural England
www.naturalengland.org.uk

Natural Resources Wales
www.naturalresourceswales.gov.uk

Scottish Natural Heritage
www.snh.gov.uk

The Postcode Plants Database
www.nhm.ac.uk/nature-online/life/plants-fungi/postcode-plants

You can source seed suppliers through the internet.

Always enquire about where the seed has come from!



Weaventhorpe Dale
©Richard Smith

Creating a meadow from scratch

Soil & turf stripping

The most effective way to create a wildflower meadow is to strip the existing turf or other vegetation along with the first 5-10cm of topsoil, then sow a mixture of wildflower seed and grasses into the soil. Removing this turf and topsoil will considerably reduce the nutrient levels of the soil, making it more suitable for wildflowers.

Raking

The site now needs to be raked to break up the surface and remove any large stones and debris. This should be done just before seeding.

Seeding

With a clear site to seed on, a seed mix of grasses and wildflowers can be used. Discuss your ideas and requirements with your supplier. Try to get a good mix of species to ensure a long flowering season with flowers of different shape and size. This will maximise the suitability of the site for a variety of different pollinator species. For a large meadow site, use a tractor drawn seeder. For smaller areas you can sow the seed with volunteers. Remember to sow the seed half horizontally across the site and half vertically, in order to get an even distribution.

Sowing rates

If you have a bare site to sow, you can use a seed mix containing wild grasses. The seed should be sown at a rate of 10-15kg/ha, or up to 5g/m².

By planting a variety of wildflowers with differing flowering times, we can help pollinators to have a more diverse range of pollen and nectar to feed on throughout the year.



There is no need to seed or plant into sites which already have lots of different species or other important habitats.

The best way to find out what you already have is to let the grass grow long and see what plants appear – you'd be surprised at what can turn up: orchids have returned to some sites, just through cutting the grass less often! Just giving the mower a rest and letting the grass grow may be all that you need to do to let wildflowers flourish. However in most cases only a few flowers may appear – plants like buttercups, dandelions and daisies. In which case you may want to introduce some more species yourself; this can be done through seeds or plug plants (pot-grown plants that have been given a head start).

Wildflower seed and plugs are not cheap so effective planning can save you money and help to ensure your project is successful. Research your site to make sure you know what the local conditions are. You can then be sure that you are planting appropriate species for the soil type and pH you have. You will also need to think about how wet the ground normally is and what level of shading the site is likely to experience.

Meadows can be successfully created by enhancing existing grassy areas or starting from bare ground

Land ownership

Before starting your project, make sure you have received written permission from the land owner and they are fully aware of any expectations you have of them for future maintenance of the meadow.

What type of soil do you have?

You should only try and establish wildflowers which can be grown in your particular type of soil. Dig some samples of soil from across your site and test them for pH. You can get the testing equipment from most garden centres. This will help to guide you on the type of meadow you should be creating.

Once you know your soil pH, it is much easier to select the appropriate species of wildflower for your site. The best species to plant will be those that occur naturally in the area in which you live.

Seed selection

Managing your meadow is key to having a spring flowering or summer flowering meadow. If you can have both, you will be providing more opportunities for pollinators to feed for longer in your area. Spend some time researching what colours and species you would like to see and look to grouping these according to flowering time. Plants such as red clover, yellow rattle, bird's-foot-trefoil and red bartsia are great nectar and pollen sources for bumblebees. Knapweed and scabious are useful nectar sources for butterflies.

Have a look at our Plants for pollinators section.

If your botanical skills are being challenged you can find out what is likely to be growing in your post code area by visiting <http://www.nhm.ac.uk/nature-online/life/plants-fungi/postcode-plants/>

Enhancing an existing grassy area

Wildflower meadows can be created by enhancing existing grassy areas by sowing wildflower seed or planting plug plants. However, just sowing wildflower seed onto a grassy area will not be successful. Wildflowers will struggle to grow in dense, vigorous grass – ground preparation is the key to success. You need to expose the soil or create gaps in the grass for wildflowers to stand a chance of growing.

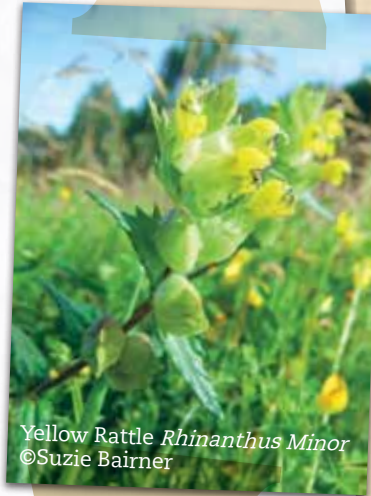


Chain harrowing ©Susan Dilworth

The best way to do this is to cut the grass very short and remove the cuttings. This can be undertaken by machine or a team of volunteers raking the site. Following mowing, the ground

should be broken up to expose bare ground and create gaps in the grass to give the wildflowers space to grow.

This can be achieved by chain harrowing or scarifying (breaking up the grass thatch to open the ground for seed).



Yellow Rattle *Rhianthus Minor* ©Suzie Bairner

In addition you may want to consider enlisting some assistance from Mother Nature – Yellow rattle (*Rhianthus minor*), pictured right, is a hemi-parasitic plant that weakens the grass. Yellow rattle seed can be included within your wildflower seed mix. It will also produce an attractive yellow flower which is of use to pollinators in its own right.

The choice of native plant species needs to be carefully considered. Find out about local wildlife issues and priorities, e.g. rare plants and insects, and try to link your meadow to these plans.

Enhancing an existing meadow

Natural regeneration

If your site is very close to wildflower-rich grassland, seed can naturally spread across. This is a good option if time permits, as allowing natural colonisation will lead to the establishment of locally suited species.

- Species which thrive in your area will hopefully establish themselves into your grassland, however it may take many years and you cannot guarantee the results.

- It is cost effective as there is no need to purchase seed.

HOW?

- Open up the existing grassland sward by cutting bare patches of soil for seed to germinate.

- Allow wildflowers in the surrounding area to flower and set seed.

Green hay

A more effective method is to use green hay. This is a way of giving nature a helping hand. Green hay is freshly cut hay which will provide a source of native wildflower seed produced within your local landscape.

It is cheaper than buying seed mixes, however, be sure that the hay comes from a flower-rich grassland site and make sure you obtain appropriate permissions, it may be worth contacting your local Wildlife Trust or TCV (The Conservation Volunteers).

HOW?

You will need to find a nearby wildflower-rich meadow from which you can take some hay. The hay must be cut only once the seed has started to ripen.

- Immediately after the hay is cut, transfer to your site and spread it thinly onto a prepared seed bed. Carry out work in late July - August but ideally not in drought conditions.
- Use a roller to bed the seed into the ground. Lots of volunteers treading across the site can have a similar effect.

Plug planting

For a large area of meadow, plugs can be expensive, costing around 60p each. However, they a great way of getting volunteers involved in your project. Your volunteers can help select the species to use on your site and help on the day with the planting.

HOW?

Generally, plugs should be planted at a density of up to 5 plugs per m². The density can be reduced for larger areas and you will still get the same effect. They should be planted in autumn or spring, but keep an eye on the weather as they will die if they dry out. They may need to be watered if the weather is particularly dry. Try to plant the plugs in groups of three or five in order to achieve a more natural look.

Sowing seed

This is the most common method used to create wildflower-rich grasslands. A range of seed mixes can be purchased, or you can order seed separately and mix your own, but ensure you select one which is suitable for the site's soil type.

Seed should be purchased from specialist suppliers and of native-origin, ideally from your local area or region.

HOW?

Sow onto the surface of a prepared fine seedbed in autumn or early spring. Depending on the size of your meadow, you may wish to source a tractor driven seed drill. Seed should be bulked with sand and planted half horizontally across the site and half vertically, in order to get an even distribution.

Sowing rates

A mixed grass and wildflower mix should be used at a rate of 10-15 kg/ha, or up to 5g/m². If sowing a pure wildflower mix onto existing grasslands then use 1-1.5kg/ha, or 1g/m². Your seed supplier should be able to offer advice. The sown land should be rolled to ensure seed is fully in contact with the soil.