



James & Claire Benn are often asked how they established the wildflower meadow at Potter's Farm. Quite simply, they were lucky. The ground hadn't been farmed or fertilised for years and years and when geo-thermal pipes were laid, the land got churned up, rendering the grass to bare soil. This resulted in bare, infertile ground on which to scatter seed. In retrospect, they'd have chosen a seed mixture with fewer grass species (live and learn!) but the wildflowers persist well and at the last count, there are over 35 different species.

The Potter's Farm meadow is predominantly made up of perennial wildflowers as with annuals, the soil has to be harrowed/turned over in some way to allow the annuals to self-seed. This isn't something the Bennis want to do as they don't wish to release carbon from the soil or use heavy machinery on the site.

Extra seed has been added over the years and if you do decide to plant even a small wildflower area, expect the Oxeye Daisy to be prolific. It's a 'pioneer species', taking hold as the dominant flower for the first three to four years. In time though, the other perennials get a grip and the Oxeye will reduce in number - but having a field of Oxeye Daisies is no bad thing to look at for a while.



Twelve years after establishing the meadow, the Bennis created raised mounds, which has helped to create better drainage on the (very) heavy clay soil, and it makes the field look more interesting in winter. In winter 2020, they also planted new hedgerow stock on some of the mounds nearest the fence to create a wildlife corridor from one end of the field to the other.

If you really wish to get serious about creating a wildflower meadow (no matter how small), here are a few things to consider and more resources with in-depth information are easily available (Claire is happy to help/advise).

Get rid of the grass/topsoil

Do this by using a spade, making sure you go down deep enough to lift up the grass, roots and all - about 5cm deep. If you're being ambitious and going large, hire in the right equipment to undertake a scrape.

Remove the Competition

Leave the area for three to four weeks to see what comes up; a session or two of removing thugg'ish wild plants (e.g. nettle, dock, sow thistle) will almost certainly be needed. You'll need to keep an eye on things after seeding too - and make sure any grass that attempts to grow back is removed.

Assess your soil type

The seed mix you need will be determined by your soil type; sand, clay, chalk or some kind of combination. The best way to tell what type of soil you have is by touching it and rolling it in your hands:

- **Clay soils:** are heavy, tend to hold nutrients well, are wet and cold in winter and baked dry in summer – the Potter's Farm field often has great cracks in it after long, dry spells. Clay soil has a smearing quality and is sticky when wet. It's easily rolled into a long thin sausage and can be smoothed to a shiny finish by rubbing with a finger. If it's not a heavy clay it won't get quite as shiny and be as easy to make into a sausage.
- **Sandy soils:** are light, dry, warm and low in nutrients as the nutrients drain away easily. Sandy soil has a gritty element – you can feel sand grains within it, and it falls through your fingers. It cannot be rolled to make a sausage shape. If it isn't a coarse sand and perhaps a sandy loam, it may stick together better.
- **Silt soils:** are fertile, light but moisture-retentive, and easily compacted. Pure silt soils are rare, especially in gardens. They have a slightly soapy, slippery texture, and do not clump easily.
- **Loams** are mixtures of clay, sand and silt that avoid the extremes of each type.
- **Chalky soils** are very alkaline and may be light or heavy, with the chalk element sometimes often sitting only 6" below the top level of soil. If soil froths when placed in a jar of vinegar, then it contains free calcium carbonate (chalk) or limestone and is lime rich.

Calculate/measure the area to be sown

Don't guess, get a tape measure out to calculate the square footage/ meterage as this way, you won't waste money buying more seed than you need.

Level/cover the scraped area

It can be a good idea to re-establish a level playing field by topping off the scraped area. What you use will depend on your soil type but under no circumstances use good topsoil, compost or any organic matter. Wildflowers do best on 'unfertile' soil whereas grass (and many plants such as nettle, dock and thistles - which you may need to control somewhat) do best on more fertile soil. Calculate how much sand or sand + poor-quality (top) soil you'll need to level off the area. On heavy clay, use a greater proportion of sand to soil - even add some grit. On sand, use less sand and more soil. Try and source the soil you use from somewhere in your garden but again, make sure it's not enriched in any way.

The Seed

Ideally, choose native wildflowers. 'Pictorial Meadows' (such as seen at the Olympic Park) are an invention by ecologist Nigel Dunnett and although popular, are not true wildflower meadows. This is because they usually contain a proportion of non-native wildflowers and often contain a high proportion of annuals, which means the soil needs to be turned to get the best results from dropped seed. A true British wildflower meadow contains only native species and will support native insects, butterflies, moths, crickets and birds/skylarks. Leave the 'exotics' for your borders so they can service the pollinators from there.

Choose seed that's best for your soil type and buy a little over what's recommended for the area you're sowing. Most of the websites will offer guidance as to how much seed you'll need; 1 to 2 teaspoons (5 to 10g) maximum per square metre is generally plenty.

By all means include some annuals so you get a bit of colour in the first year, but choose a predominantly perennial seed mix to ensure you don't have to turn the ground over every year. Try and buy from a reputable site supplying organic native seeds. Most suppliers enable you to buy specific species which you can then mix together. If you really want wildflowers, don't include any grass seed in your mix.

- Naturescape: www.naturescape.co.uk
- British Wildflower Plants: www.wildflowers.co.uk
- John Chambers Wildflower Seeds; sold through the Plantlife shop, www.plantlife.org.uk **This is our top recommendation as it has seed mixes specific to soil types.** You don't need to be a member to buy from the Plantlife shop.

Yellow Rattle is a semi-parasitic plant that feeds off grasses. If you don't have any grass in your seed mix, including yellow rattle may not be effective as to begin with, it'll have no grass to feed on.

However, if you're simply allowing an area of lawn to go wild, scraping away some of the grass to loose, bare soil and sowing some yellow rattle seed may prove helpful. Yellow rattle needs cold conditions to germinate properly so mix the seed with some sand and sow it in cold conditions. Pam Lewis recommends a good source for fresh yellow rattle seed: stickywicket.garden@virgin.net (01300 345476). Plantlife and other suppliers also stock it.

Sowing the Seed

Make sure the soil you're going to be sowing on is loosened up a little - avoid sowing on compacted soil or when it's water-logged or dust dry. Sowing towards the end of August is probably the best time as this will be when you cut down the meadow and natural seed-dropping/distribution occurs., but a mid-Spring sowing can also yield decent results. The following method is how the wildflower area on Goulburn Green was established and even though sowing didn't take place until mid-April, with a little help from a watering team, the strip performed brilliantly.

Quantities: Pam Lewis recommends 10g of seed to 5L of sand/sawdust, but if you've got a large area to sow, you may need to reduce the amount of sand/sawdust (see next point).

Mix the seed with damp sand and/or damp sawdust: avoid simply throwing seed on the soil; mix it with damp'ish sand or a sand and sawdust mix. Using sand/sawdust means you can see what you're doing, helps with even distribution and ensures you avoid over-seeding. Dampening the sand/sawdust also provides a small amount of water to help with germination, and it stops the mix from being blown away. Mix everything up in a wheelbarrow (or two) of damp sand/sand & sawdust using a spade to begin with and then your hands.

Distribute: once mixed, pick up a good handful and sow by rubbing your hands together to release the seed-sand mixture, moving about as you do so.

Do be aware that if the weather is very dry, it'll take longer for your seeds to germinate (the strip on the Green was assisted by a watering team as that year, it was a dry spring). Equally, late sowing (e.g. October) can cause problems if persistent heavy rainfall occurs immediately after sowing, as the seeds can drown or rot.

Keeping out Invasive or Thug'ish Wild Plants

Some native wild plants can be invasive or very thugg'ish. Examples are creeping buttercup, sow thistle and dock (and you might get self-seeded rapeseed or cereal crops from time to time). If plants like this call for some management PLEASE don't treat these with weedkiller - dig them up after a rainy spell before they have a chance to set seed. It's a bit of a chore but in time, you'll need to do this less and less. And remember, many unwanted plants are beneficial to insects, particularly moths (which love Ragwort), and Goldfinches love teasels and other thistles.

Topping Up with Extra Seed

No sowing procedure is accurate in terms of precisely how much seed goes where. Plus, a decent meadow takes a year or two to establish so don't be disappointed if it doesn't look stunning in year one. Look out for bare patches though; loosen up the soil in those areas and sow more seed.

Learn & Enjoy

Even if you've tried to get the mix right for your soil conditions, some wildflowers will perform better than others. Go out across the summer months and pick as many different species as you can find and identify them; the Sarah Raven Wildflower book is an invaluable resource.

Resources

- **'Making a Wildflower Meadow'**, Pam Lewis. An excellent resource.
- **'Wildflowers'**, Sarah Raven, an encyclopedia of British wildflowers, listed by common and Latin names and with advice on different environments and soil types.
- **'Creating a Flower Meadow'**, Yvette Verner

