

GUIDELINES FOR SOWING WILD FLOWERS

Modern farming has led to widespread conditions of high fertility, which aggravates the weed problem. Methods of sowing wild flowers have to take account of this.

Fertility.

There is a view that wild flowers will not establish under conditions of high fertility, and that topsoil removal or the growing of special crops to use up nutrients is necessary. Although topsoil removal from small areas of chalk soils may be feasible, appropriate management or use of the grassland parasite "Yellow rattle" is usually more effective. Yellow rattle is especially helpful when establishing wild flowers after high yielding corn crops.

Seedbed preparation and dormant seed.

Remove all weeds before sowing. Coarse grasses such as cocksfoot, false oat grass, Yorkshire fog and rye-grass are too powerful to coexist with the majority of wild flowers and should be removed. If there is doubt as to whether weeds such as couch have been eliminated, it is better to delay sowing. Avoid areas infested with docks, nettles or creeping thistle, since they will reappear from dormant seed.

Converting grass to wild flowers

- ☛ If the grass is **rank** or **flattened**, cut and remove and allow to re-grow before spraying with a herbicide. After 10–14 days, plough or rotovate, and work down to a firm and well consolidated seedbed (NB wild flower seeds are very small. 1000 seeds per gram is a common size). **Do not sow yet.**
- ☛ Massive amounts of **dormant seed** will now germinate. As soon as the area greens up, harrow on a dry day to kill seedlings. This will bring up more dormant seed, which can also be harrowed. Repeat this process until dormant seed diminishes.
- ☛ When sowing time arrives (first week September), if the area is still **greening up**, spray off on this occasion with half rate herbicide. Sow next day by means of broadcasting or allowing seed to fall out of the seed drill onto the soil surface - autumn only.
Do not disturb the soil surface since this will bring up more dormant seed. Do not drill, as seed may get buried and will fail to germinate.
- ☛ **Roll** to consolidate. Wild flowers can be left on the soil surface in the autumn, but need to be lightly covered in the spring.
- ☛ Small areas (less than a tennis court) will need to be sown by hand. Remember to bulk up the seed with sand or sawdust, x 5 or x 10, to help you see where you have sown. To avoid running out of seed, divide up the area and test your sowing rate. Derelict areas with severe weeds can be sown with grass only, using a herbicide to remove weed seedlings, with wildflower plugs being added later.

Converting arable to wild flowers.

- ☛ Clean stubbles will have few perennial grass weeds and little if any dormant seed of perennial species. These areas can be ploughed, worked down to a seedbed and sown immediately with the grass / wild flower seed. However there will be massive growth of annual weed in the next growing season – see Management in Year 1

GUIDELINES FOR MANAGING WILD FLOWERS

Management in Year 1 (same year if spring sown, subsequent year if autumn sown).

Keep all areas mown down to 20 cm (8 inches) until end of June. This will be high enough to avoid yellow rattle which is an annual. Three or four cuts may be required in ex-arable or ex-allotment areas, where fertility will be high and where there may be large amounts of weed such as fat hen. Remove cut material in small areas, but with field scale conditions, cut little and often in a dry period. Mow or top at the end of the growing season.

Management in subsequent years.

Clover has emerged as a significant problem where ex-arable areas are converted to wild flowers, and where clover has not been seen for years. For this reason it is recommended that clover is not put in the seed mix. If large numbers of clover plants appear, these may be reduced by spot spraying, otherwise the emphasis should be on not grazing or mowing too short, since this encourages clover at the expense of the other species. With the exception of taking a hay cut, do not reduce sward height below 15 cm (6 inches).

Management regimes. Two regimes are recommended:

- ☛ Allow wild flowers to flower / set seed and cut end of July / early August. Remove cut material, arid then graze or mow re-growth in late autumn. This regime favours early species such as cowslip and cuckoo flower. Late autumn grazing is essential where the grassland parasite Yellow rattle is used. This is the best option for high quality sites.
- ☛ Cut or graze to end of May, then allow wild flowers to flower / set seed. Cut and remove growth or graze at end of September, and graze or mow any subsequent re-growth. Remember to leave some heaps of the cut material in a corner for grass snakes. This is the best option for amenity sites.

Yellow Rattle.

There are many areas of old grassland where the wild flowers have been eliminated by herbicides, or where neglect has encouraged coarse grasses to dominate. Yellow rattle is an invaluable parasite of grassland, and will dramatically reduce the growth of these coarse grasses, and encourage the introduction of additional wild flowers as well as existing ones. Yellow rattle is an annual and produces large amounts of seed, but it depends on an annual hay cut at the end of July, as well as end of year grazing which ensures that the flat-shaped seed makes good contact with the soil surface. It can be introduced into grassland as follows:

- ☛ **The Farmed Context.** Graze the field as tight as possible, then harrow hard to bring up 30% bare earth. The yellow rattle seed can then be broadcast, and sheep and cattle returned to the field to tread it in. Once the yellow rattle gets going, wild flowers can also be introduced.
Sowing rate: 1g/10m².
- ☛ **The Garden Context.** Rotary mowers are unable to tread in the seed! Unless the area is raked hard, the grass will swamp the yellow rattle when it tries to grow. Spray off pathways 0.5m wide about 3-5m apart with a herbicide, rake off the dead grass and then scatter the yellow rattle seed into these pathways, after which it should be firmly trodden in. Make sure that surrounding grass does not shade it out. **Sowing rate: 0.5 - 1.0g/m².**

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