YELLOW FLAG WILDFLOWERS

Wild Flower Manual

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Contents:

Page I	Techniques For Creating Small Wild Flower Meadows
Page 2	Techniques For Creating Small Wild Flower Meadows (con'd)
	and using Yellow Rattle
Page 3	Sowing Tips For Individual Seeds
Page 4	Planting Instructions for Bulbs and Plant plugs

TECHNIQUES FOR CREATING SMALL WILD FLOWER MEADOWS

SOWING

Choose a site that has not been heavily fertilized. The meadow will establish itself best on poor infertile subsoil. If this is not possible remove the topsoil. It is best to choose a sunny location, (unless you are intending to create a woodland area) in a spot that can be easily reached for mowing. Dig over the area thoroughly and remove all weeds. Choose a suitable meadow mixture from our range to suit your location and soil type. The seed may be sown throughout the year but spring or autumn are preferable. The meadow mix can either be sown alone or with some annual cornfield seeds which have the added advantage of providing a bright array of color in the first year whilst protecting the more slow growing perennials as they develop. This technique is known as 'nursing'.

Remove any stones from the area before sowing; rake it thoroughly before fine sieving. The plot should then be rolled until level. Water until soaked and lightly sow the seed at the rate show below (mixing with a little silver sand will help to ensure an even spread.)

Sowing Rates: Meadow mixtures: 3-4 grams per square meter

Cornfield annuals: 2 grams per square meter Pure Wild Flower seed: 1 gram per square meter Pure Meadow Grass: 5 grams per square meter

For very small 'Mini Meadows' of less than 5x5 meters it is best to sow a mixture of Wild Grasses and then introduce the wild flowers as Plant Plugs at a later date. Use our mixture WG11 (F) and plant plug selection for meadows (order code PS6).

For further advice please visit the "frequently asked questions" section of our website at http://www.wildflowersuk.com/knowledgebase.asp or use our online "Meadow Mix Calculator" at www. wildflowersuk.com/design.asp

MEADOW ESTABLISHMENT

Management will depend upon the mix/mixes sown and the type of meadow required, 4 different methods are described in the following section:

1. Perennial Grass and Wildflower mixtures without cornfield annuals:

In the first year it is unrealistic to expect everything to germinate, establish and flower, however, in the second and following years it is possible to adapt a more permanent management regime. If in doubt about when to cut, then simply maintain the grass height at approximately 3 to 4 inches in height for the first 2 seasons. If followed carefully, this method will take into account the wide range of growing conditions such as soil fertility and weather and will prevent damage to small seedlings from overly competitive grasses and weeds. Remember the golden rule that whilst trying to establish a meadow, it is always better to cut, than not to cut. That way you will reduce the risk of damage to delicate seedlings from overly competitive grasses and weeds.

In year 2 and beyond, continue cutting as necessary until around mid-May (for a summer meadow), and then leave uncut to allow flowering in June/July. As the vegetation starts to die down at the end of summer the meadow may be cut. Leave the cuttings to one side for a day or so to enable any insects to escape and then remove to prevent an increase in fertility. Follow this by occasional cuts throughout the autumn and winter. If cutting is stopped earlier

in the year (around March) and then left, it is possible to encourage spring flowering species to flourish. This would then be followed by a cut in early July. On the other hand if cutting is continued until the end of May a summer meadow can be encouraged which can be left until October before cutting. We also offer a range of Native Wild flower bulbs as an easy way of establishing a spring meadow.

2. Perennial grass and Wildflower mixtures with nurse crop of cornfield annuals

This technique has 2 main benefits.

- a) During the first year, this type of meadow will require very little attention.
- b) An array of color can be expected during the first year.

The method described above should still be followed however the meadow can be left virtually unattended until the annuals have flowered. Then in late summer the meadow can be mown and the cuttings removed. Please note that the annuals are intended for the 1st year only with this method.

3. Perennial mixtures sown without meadow grass:

Such mixtures are normally used for over sowing into existing grassland. Initially cut the grass as low as possible, and then remove cuttings and surface moss. If necessary lightly scarify the soil surface. Sow at a rate of 1gm per sq. metre ensuring good soil contact. Rake in well and if necessary water with a fine hose. Cut the grass regularly during the first year maintaining at a height of approx. 3 inches and remove any unwanted weeds as soon as they appear. DO NOT USE ANY FERTILIZER DURING THIS PROCESS. The success of this technique is limited and depends on the growing conditions and the type of grassland into which the Wildflower seed is being introduced.

4. Cornfield Annuals sown alone:

Cornfield annuals sown alone in autumn or early spring will flourish on most soil types and will provide a mass of color throughout the summer of the first year. However, if you wish this type of meadow to re-establish itself naturally from its own seed dispersal then it is essential that the dead vegetation is rotovated back into the ground during autumn or early spring of the following years. Please also note that cornfield annuals will NOT generally work in established grass and it is always preferable to sow onto bare soil.

USING YELLOW RATTLE

Yellow Rattle is a particularly interesting and attractive species that is useful when trying to establish and increase the number of wildflowers within a meadow. A semi-parasitic species, it draws nutrients through the roots of grasses and in doing so can help suppress grass growth. Yellow Rattle is best introduced as seed and sown between October and December. Prepare the area by cutting the grass as low as possible and then rake or lightly scarify the ground so that good soil contact can be achieved. Sow at 1 gram per sq. meter and lightly roll or trample following sowing, to firm the seeds into the ground. Germination can be expected the following spring. Being an annual it is important not to cut or graze yellow rattle until the middle of the following July when it will have set seed. Where suitable most of our mixtures already include Yellow Rattle. Alternatively it can be purchased separately (order code ST85).

SOWING TIPS FOR INDIVIDUAL SEEDS

Guidelines

It is possible to sow Wild Flower seeds directly outdoors onto a carefully prepared seedbed. However, it is usually preferable to sow into trays of seed compost. If you do this please try to use one of the brands of 'Peat-free' composts now available. This is important because the commercial extraction of peat is threatening our peat bogs. Place the trays outdoors in a cold glass house or under a sheet of glass will substitute. Keep the compost moist and once the seeds have germinated, wait until they reach the '3 leaf' stage and then prick out into individual plant pots. Grow on into full plants before planting out into their permanent positions. If you do sow directly outdoors it is important that the seedbed is kept free of all unwanted weeds until the Wild Flowers are well established. The recommended sowing rate is 1 gram per sq. meter.

WHEN TO SOW

Wild Flower seeds can generally be sown at any time of year. However, it is best to avoid periods of drought or very waterlogged conditions. Varieties requiring stratification are best sown in trays of seed compost in the autumn and placed outside for germination the following spring.

SPECIAL TREATMENT

There is no hard and fast rule as to how long Wild Flower seeds take to germinate. Some types will do so quite readily, whilst others can take a long time. However, germination of certain Wild Flower seeds can be improved by applying special treatments notably:

- **1. Scarification:** This is where hard coated seeds can be encouraged to germinate more readily by rubbing lightly between two sheets of sandpaper hence allowing moisture to penetrate more readily. Within our range of seeds this applies typically to Meadow Cranesbill, Trefoils and Vetches, Bluebell, Ribbed Melilot and Sainfoin.
- **2. Stratification:** This is where a seed needs to be subjected to a period of chilling before germination will occur. Mixing with some moist compost and placing the seed in a refrigerator for approx. 8 weeks can achieve this. Alternatively seed can be sown outdoors in the autumn for germination the following spring. Within our range of seeds this treatment applies to varieties such as Mignonette, Sweet Violet, Bluebell, Weld, Sweet Cicely, Hemp Agrimony, Clustered Bellflower, Wild Carrot, Cowslip, Oxlip, Yellow Flag Iris, Water Avens, Primrose, Meadow Sweet and notably Yellow Rattle.

Exceptions

The following varieties of Wild Flower seed should be sown directly outside onto soil and not in trays of compost: Corn Poppy, Corn Marigold, Cornflower, Long Headed Poppy, Wild Pansy, Yellow Rattle, Corncockle, and Corn chamomile. Yellow Rattle, should always be sown together with seeds of grass on which it is a partial parasite. You may also find that certain varieties germinate best in different types of compost e.g. seeds of wetland plants will often germinate well in coir based compost, whereas the seed of heather and foxglove would require a low Ph (acid based) compost.

Depth of Seeds

Small Wild Flower seeds should be sown straight onto the surface of the soil or compost and left uncovered. Larger seeds should be covered with a light layer of compost or soil.

PLANTING INSTRUCTIONS (BULBS)

On receiving your Bulbs, remove all packaging and plant immediately. If the weather prevents planting, then store in a dry, cool shady place until things improve. Stored carefully in this way most bulbs should keep for at least a week. A hole approximately 3 times the length of the bulb is required when planting. If the soil is especially heavy then the addition of a little sand can help. Wood anemone rhizomes are planted up to 1" below the surface and as with other Woodland bulbs will do better if a rich soil containing leaf mould in a shady position can be found. Other bulbs e.g. Wild daffodil, Star of Bethlehem, Snakes head fritillary, and Wild Tulip can be planted in grass by removing and then replacing a section of turf. Please bear in mind that some bulbs notably Wild daffodil can often take a season to settle in and flower.

PLANTING INSTRUCTIONS (PLANT PLUGS)

Individual plants (order code IP) are supplied in quantities of 10, 20 and 50. The trays in which these are supplied actually contain 12, 24 and 60 cells. You may therefore notice few cells with plants that are missing. Please be assured however that all trays have checked prior to dispatch to ensure they contain the correct number of plugs. On receiving your plants immediately take them out of the box, water well and stand in a shady place away from any slugs or snails to recover for a day or so. Plant labels can be found on the top or sides of each cell. Plant plugs should then be placed in 3-inch pots containing an appropriate soil based potting compost or lined out approx 6 inches apart in a carefully prepared nursery bed. After this they should be kept well watered and left to develop for several months before moving to their permanent planting positions. When planting into established grass it is advisable to first cut the areas where the Wildflowers are to be introduced and create a small bare area up to several inches around each planting position to reduce initial competition. Finally please note that some of the plants you receive will not necessarily be showing much growth. This depends on the time of year and is normal. Many Wildflowers are dormant (no foliage) over winter. Typically this applies to Meadow Cranesbill and Purple loosestrife, which will often start to enter dormancy as early as August.

Tips: Before removing plugs from their cells it is often helpful to water thoroughly beforehand. Trays can easily be watered from underneath by dipping gently into a suitable container of water. This will prevent any dry compost from crumbling away and result in a "cleaner" root ball. When potting on Foxgloves a lime-free compost or soil is essential. For this purpose please use suitable ericaceous compost or request assistance from your local nursery about how to increase soil acidity.

Please note:

- The advice and tips given within this manual are for guidance only and the performance of our products will be limited to storage and growing conditions. Factors such as different soil and weather conditions should always be taken into account.
- Some of our seeds and bulbs may contain toxins and we therefore suggest that they are always kept out of reach of small children.
- For further, more detailed advice please visit the "frequently asked questions" section of our website at http://www.wildflowersuk.com/knowledgebase.asp

