

Sowing wild flora seed

Sowing depth

Seed should be broadcast or drilled on the soil surface . It should not be buried by slot-seeding. Burying seed only a few millimetres may significantly reduce the germination rate of seed sown.

When to sow

The ideal time is late summer-early autumn (August-mid September, but before mid-September in upland areas). Sowings in mid-late July (direct seeding of wild-harvested seed or green hay) can also work well but in dry summers there can be a risk of drought following rainfall, which can lead some losses if germination occurs. Plants germinating late in the autumn can be prone to frost. Spring sowing is not recommended except for areas prone to winter flooding or at high altitude where rain can wash seed away. Spring sowings can also be prone to spring/early summer drought. Some wild flowers such as Yellow Rattle must over-winter and won't germinate until the following spring.

Heavy clay soils can be difficult to work when very wet or very dry. Autumn sowings may not be possible if ground preparation is incomplete owing to summer drought. In such cases it can be better to plough the soil in the autumn, allow winter frosts to break up clods and prepare a seedbed in the spring, spray off or harrow in germinating weeds prior to sowing in late April.

Sowing is usually done as a one-off operation, but additional hand-sowings can be undertaken in successive years, especially to introduce seed of species that might be unavailable in the first year. If the sward closes up, bare patches will need to be created into which the seed is sown (e.g. by herbicide treatment or discing).

Machinery and equipment for sowing seed

Fresh, unprocessed brush-harvested wild-harvested seed must broadcast by hand. The seed must be emptied from the collection hopper into bags. It can be broadcast by one or two people from the back of a pickup or trailer driven at a slow safe rate.



Broadcasting fresh brush-harvested seed across an arable reversion site that had been previously sown with a standard “ESA” mix that had only poorly established.
Photo: Sue Everett

Cleaned wild-harvested seed mixtures are best sown over large areas using a fertiliser spinner. The rate can be calibrated by driving at a known speed, using a measured weight of seed over a known distance and by measuring the breadth of seed distribution from the spinner.

Crop-grown seed can be sown using a gravity drill with the seed metered by rollers. Corn drills with the spouts detached, or a rotary strip seeder can work well. Coulters should be set to allow seed to drop on to the soil surface.

An inert carrier, such as silver sand, can be used to help distribute processed seed evenly (the variable size of seeds can lead to heavy seeds settling). A seed fiddle, or seed box, can be used to broadcast seed over areas of 1 hectare or less, e.g. across weedkilled patches. Adding a carrier will help identify where seed has been sown, but is not essential.

Forage-harvested (chopped) material that contains fresh ripe seed is best spread using a muck spreader with a rear distributor and vertical beaters.

Large quantities of green hay that contains ripe seed are bulky to handle. Bales must be rapidly unrolled not more than an hour after being made, and the hay spread quickly, using a tractor-mounted fork or bucket. Unless very small areas are to be treated, it is easier and more efficient to put the hay through a straw chopper and spread as for forage.



Spinning processed brush-harvested seed collected from a native grassland, using a Vicon Variespreader. Photo: Sue Everett

Seed should be rolled after sowing, using a ribbed “crinkle” or “Cambridge” roller. Rolling can be repeated in early spring to help re-consolidate the seedbed, which may have suffered frost-heave over winter. Alternatively, livestock can be put into the field and they will trample the seed into the soil.

This note was compiled by Sue Everett, with help from Emorsgate Seeds (Richard Brown and Donald MacIntyre) as a contribution to the *Flora locale* Local Seeds for Local Needs Initiative and the Thames Valley Meadows Action Plan Project . October 2004.