

Factsheet

Land management to support bees and other insect pollinators

Landowners and land managers are very aware of the need to provide forage for insect pollinators. One way to do this is to plant seeds of wild flowers, and seed vendors are making it easier than ever for us to buy wild flower seeds suitable for bees and butterflies. However, in addition to planting seeds it is the **cutting or grazing regime** of meadows, field margins and verges which determines the diversity and number of wild flowers - to such an extent that planting seeds without the correct cutting regime will have short lived results, whilst a proper cutting regime - even without planting seeds - can hugely encourage wild flower diversity. Furthermore - and this is important - if you are lucky enough to have an area of established unimproved grassland, with a management regime and native species mix which dates back many years, then you should not plough and seed with introduced species. Maintaining the wildlife value of these areas depends on implementing an appropriate cutting and/or grazing regime.

The cutting or grazing regime is governed by the following principles:

- 1. Do not cut when the flowers are growing, flowering and seeding
- 2. Do cut often enough to discourage scrub such as bramble and tree saplings (unless that is what you want).
- 3. Remove the cut vegetation in order to reduce the fertility of the site because this discourages prolific grass growth, and so gives a wide variety of wild flowers the chance to thrive and provide pollen and nectar to pollinators.
- 4. Cut on a high setting to allow plants with spreading, low habits to keep on flowering.

Hay meadows and unimproved grassland

Hay meadows used to be abundant but changes in farming practices, the switch from hay to silage and intensification of grassland management means these species rich habitats have largely been lost⁽¹⁾. Yet some do remain and if you are fortunate enough to have a hay meadow or unimproved grassland then follow these management guidelines:

- Where possible, cut hay late to allow seeding of flowering meadow plants, for example, knapweed, clover and vetch. An early cut will deprive pollinators of food and will prevent seed from setting and falling.
- If hay cannot be taken e.g. in wet weather, the cut grass must still be removed. If left to decompose in situ it will increase soil fertility which in subsequent years will encourage grass growth instead of flowers.
- After the cut in July or August, aftermath grazing or autumn mowing is advised. By the end of the growing season the sward should not be more than 10 cm. (2)



Grass verges, municipal roundabouts, field margins and patches of garden or orchard

Most of us do not have old meadow ecosystems, but we may have other pieces of land which can be managed to increase the diversity and abundance of forage for pollinators. There are two options:

- Do not seed and adopt a cutting regime that favours herbaceous plants. The disadvantage of this approach is that it could take many years for a wide variety of wild flowers to get established. The outcome depends on the existing and neighbouring vegetation and the past management.
- 2. Do seed ⁽¹⁾, and still maintain a cutting regime that favours herbaceous plants. This option involves more work as the existing vegetation will need to be removed (at least in part) to establish the new species mix but the result will be quicker and you can be more deliberate in your choice of species. This might be important where you are interested to achieve a highly attractive outcome in a short period of time, e.g. on municipal roundabouts.
- 3. The cutting regime for both options should broadly follow the same principles as for the hay meadow. Cut early and late in the year but allow the flowering herbaceous to grow, flower and seed in spring and summer, and remove the cut vegetation to reduce the fertility of the soil.

FAQ

- Q What if I did no cutting surely that is the most natural option?
- A If uncut or ungrazed, the grassland becomes tall, rank and tussocky. Bracken and brambles quickly invade along with tree seedlings and the grassland is soon on its way to becoming scrub woodland.⁽³⁾
- Q Do I need special equipment to maintain my wild flower patch?
- A Small areas can be cut with a strimmer and the vegetation should then be raked and removed. Larger areas are best cut with a tractor and mower. A power scythe or Allen scythe are best for areas between 0.5 to 1 acre. These can sometimes be hired from plant hire companies or from conservation groups.
- Q Why is yellow rattle often mentioned as an aid to species diversity?
- A Yellow rattle, *Rhinanthus minor*, can increase species diversity because it can grow in large swards and successfully competes with grass. It is an annual and as it dies it eaves a gap in the grass, this can then be colonised by a wide range of wildflower species.

Links

Good weeds, bad weeds:

www.rothamsted.ac.uk/science-stories/smart-field-margins

Land management for bees:

www.bumblebeeconservation.org/get-involved/managing-your-land

Notes

 There are very many wildflower mixes available. Vendors usually provide information about suitability for location and soil type. They also provide detailed establishment and management guidance.



References

- 1. www.countrysideinfo.co.uk/meadows/losses.htm
- 2. www.rspb.org.uk/forprofessionals/farming/advice/details.aspx?id=204361
- 3. www.monmouthshiremeadows.org.uk/

These fact sheets are published by **Bees for development** as a key part of our Learning and Knowledge Programme. Our intention is that all beekeepers and organisations that support them have access to the information they need to build sustainable beekeeping livelihoods and know how to use and care for our environment wisely.

Please use this information in the education of others and acknowledge **Bees for development**.

Bees for development

1 Agincourt Street, Monmouth NP25 3DZ, UK
Telephone +44 (0)1600 714848 | info@beesfordevelopment.org | www.beesfordevelopment.org