

Legume and herb-rich temporary grass



Voluntary Measure 8

Aim: To provide enhanced food supplies and habitat for invertebrates in temporary grassland, whilst improving soil structure and providing high quality animal feed.

How: Sow a mix that includes grasses, legumes and wildflowers and at least 9 species, and allow them to flower during late spring and summer. Manage by cutting or grazing without the use of inorganic nitrogen.

This is the prescription for the CFE voluntary measure. Further guidance to get the best results is given below.

What

A diverse sward of grasses, legumes and herbs, which thrive without the use of inorganic nitrogen and provide some pollen and nectar for insects.

Why

Legumes provide the soil with free nitrogen, typically fixing between 100 and 150 Kg N/ hectare/year from the atmosphere. Legumes and herbs have high nutritional value for livestock, increasing the protein and mineral content of the forage. Some herbs can provide secondary dietary benefits, such as increased defence against internal parasites. Legumes and herbs stay leafy for longer than grasses, so digestibility and palatability do not decline as fast. Greater rooting extent helps to maintain good soil structure and resilience to drought.

Bees, butterflies, moths and a myriad of other insect life will benefit from the pollen & nectar provided by flowering plants and the greater diversity of plant species in the sward. In turn, birds and other wildlife further up the food chain benefit.

Fewer fertiliser inputs reduce the Greenhouse Gas emissions on the farm.

How

When reseeding a grass ley, sow a wide diversity of plants, including legumes (eg clover) and herbs (eg ribwort plantain) alongside a variety of grasses.

Try to include at least nine species of grasses, legumes and herbs tailored to the soil type and end-use.

They can be sown on a whole- or part-field. As an introduction, consider giving it a go as a wide buffer strip.

Establishment is most reliably achieved by shallow sowing into a fine seedbed, but leys can also be established by over-sowing into existing grassland where the sward consists of at least 50% bare ground.

Manage by cutting and/or grazing. Where possible, swards should be left to flower, even if only for short periods or by leaving uncut areas. Some legumes require care when grazing to avoid bloat and high oestrogen levels affecting ovulation rates in breeding livestock. Some herbs and legumes, such as red clover are vulnerable to tight grazing, especially in winter.

Do not apply fertiliser, as the legumes will fix nitrogen to feed the sward. Care is required with weed control, as the herbs and legumes will be susceptible to many herbicides.