



Species Rich Grassland Restoration Plan

Creation of Species-rich Grassland

Part of a Biodiversity Net Gain – small site metric calculation

Site Location

Town Head Farm

Contact Details:

J I Brough

Town Head Farm

Nethertown

Egremont

CA22 2UH

Planning application: – New Agricultural Shed

Prepared on the 02/07/2024 by:

Mrs Sandy Brown

Farm & Environmental Consultant

Head of Farm & Environmental Advisory

Species Rich Grassland Restoration Plan

Enhancement of poor modified agricultural grassland to good quality, species rich wildflower grassland

Benefits of Enhancement: This will enhance biodiversity and soil condition, whilst working towards a species rich neutral grassland mosaic containing indicator flower species and grasses.

Species rich/flower laden grassland provide important habitat and foraging sites for invertebrates, including wild pollinators such as bumblebees, solitary bees, butterflies and hoverflies, and farmland birds like the yellowhammer. It can also improve vegetation nutrient content for farm animals as well be important as part of an integrated pesticide management plan around the farm.

Previous Management

Field number NX9907 2944 (see Biodiversity word document) has been managed as a grazing field, receiving 60 kg/ha 25.5.5 inorganic nitrogen, phosphate & potash as well as 25m³ of rough or slurry organic fertiliser. .

Summary of grassland enhancement & creation

This plan will see the cessation of inorganic fertiliser application, reduced and targeted grazing / cutting and overseeding (planting with a wildflower mix at 16 kg/ha), over a 15-year period following an incremental management schedule.

The development site including the Biodiversity Net Gain restoration site is not directly identified in the Local Nature Recovery strategy and is not within 500m of a SSSI or protected zone.

Species rich grassland restoration plan schedule

Years 1-2

Obtain soil samples, adjust soil ph if required (move towards 6.0-6.5) and overseed, begin to follow grazing/cutting regime, cessation of fertiliser applications.

Years 2-5

Continue to manage as per plan. Indicator species should be evident (see list of indicator species).

Years 5-10

Continued managed, carry out further overseeding as required.

Years 10-15 years

Maintain and manage as a species rich neutral grassland.

Recommended management

To assist in achieving the aims and deliver the environmental benefits for this enhancement it is recommended that the following plan is followed.

- sow an appropriate seed mix between April/May and early September (mid to late summer is usually the best time to sow wildflowers)
- sow the wildflower/grass species mix at a minimum seed rate of 16 kilograms (kg) per ha
- in the first 12 months after sowing, cut the margin or plot regularly to help the sown species to establish.
- cuttings should be removed or shredded to prevent weed ingress and patches of dead material developing.

When flowers/herbs and grasses are fully established (typically from the second spring after sowing) you should manage as follows.

- Cut or graze in the spring (before April) if necessary to prevent grasses smothering the flowering species, remove stock whilst the flowers are blooming.
- It may be possible to encourage further natural development of seeds by allowing the seeds to set before grazing or cutting.

- Therefore, cut or graze the area each year between 15 August and 31 October to leave a plant height of between 10 centimetres (cm) and 20cm. Leave at least, 10% of the area uncut or un-grazed.

Keeping records

Records or evidence should be collected such as timings of management and photographs. This will include any steps you've taken to follow the recommended management set out above. It's your responsibility to keep such records if you want to rely on these to support your work.

- Seed invoices
- Field operations at the parcel level, including associated invoices.
- Stock records to show grazing activity on parcels.
- Photographs of the field.

Monitoring

Monitoring should be conducted annually to check on progress of wildflower establishment.

What to sow

The seed mix should contain both grasses and perennial flowering plants, such as:

Flower species

- agrimony
- bird's-foot trefoil
- black knapweed
- field scabious
- lady's bedstraw
- greater knapweed
- meadow buttercup
- ox-eye daisy
- red campion
- red clover
- ribwort plantain
- sainfoin
- salad burnet
- self-heal
- sorrel

- white campion
- wild carrot
- yarrow
- yellow rattle

Grass species

- common bent
- crested dog's-tail
- sheep's fescue
- slender red fescue
- smaller cat's-tail
- smooth-stalked meadow grass
- sweet vernal grass

Total sowing rate

16kg per ha to provide enough plants when the mixture is established.

When to sow

To meet option requirements, establish the mix in spring or late summer or early autumn

How to sow

Wildflower seed is very small so will not germinate if drilled too deeply. Broadcast or trickle the seed on top of the seed and roll or harrow to help ensure good seed to soil contact, retain moisture, and reduce movement of slugs within the soil profile.

Check for slug damage and control using wildlife-friendly slug bait where necessary.

Controlling weeds

Top emerging flowers and weeds at least 3 times in year 1 for spring sowings and at least twice in year 2 for late summer / autumn sowings. Regular topping prevents weeds smothering the slow-growing flowers so that all sown species establish successfully, and toppings can be left.

Before the beginning of April each year make sure vegetation is short enough to allow flower species to grow without competition from dominant grasses. Cut and remove summer growth between 15 August and 31 October to help reduce soil fertility and boost flower numbers in subsequent years.

Appendix

Image 1: Expected Species-rich Grassland after 15 years since creation

