



## **Management Plan**

### **Species Rich Grassland Management Plan**

Enhancement of modified grassland to a Species-rich grassland

## **Site Location**

Fleming Hall

## **Contact Details:**

Mrs Christine Richardson

Fleming Hall Farm

Gosforth

CA20 1AD

Planning application: – New stock housing 384 m<sup>2</sup> footprint

## **Prepared on the 18.03.2025 by:**

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Head of Farm & Environmental Advisory

## **Species Rich Grassland Management Plan**

### **Enhancement of poor modified 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**

Plot of land, with location reference NY04991 03225, (see Biodiversity plan document) has been managed as a low input field, grazed periodically by sheep. The plot will be enhanced to achieve a species rich grassland status of good condition over a 30 year period.

### **Summary of grassland enhancement & creation**

This plan will see targeted grazing cutting and overseeding (planting with a wildflower mix at 16 kg/ha), over a 30-year period following an incremental management schedule.

The field parcel 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**

### **0-3 months**

Obtain soil sample to a depth of 7.5 cm, submit to appropriate laboratory to assess phosphate and ph levels.

### **4 months – Year 2**

Adjust soil ph if required ( move towards 6.0-6.5), manage grass height by cutting or grazing. Overseed site either spring or autumn time, with appropriate flower seed mix at the required rate, begin to follow cutting regime, keep grass heavily grazed or cut through out autumn/winter to March.

### **Years 3-5**

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

### **Years 6-10**

Continued managed, carry out further overseeding as required.

### **Years 11-15 years**

Maintain and manage as a species rich neutral grassland.

### **Years 16-30 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.

- Broadcast sow an appropriate seed mix between April/May and early September (mid to late summer is usually the best time to sow wildflowers). Ensure grass is grazed heavily before overseeding and is then grazed for 3 days, to allow the young seedlings to strike (to take hold).
- 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 or graze, firstly cut or graze the plot for 3 days after overseeding then cut or graze if grass still out competes with the flower mix. Then cut or graze the plot from flower wilt, probably in August, to end of March.
- 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 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 20 cm. 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. Frequency and abundance of indicator flowers should be assessed in July to ensure all flowers are present.

Monitor bare soil %, weed coverage, grass and flower abundance, rye grass coverage.

Report to be submitted to the planning board year 2,5,7,10,20 & 30 years by Mitchells Farm & Environmental Advisory.

**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**

10- 16kg per ha – overseeding rate , to provide enough plants when the mixture is established.

## **When to sow**

To meet option requirements, overseed the mix in spring or late summer or early autumn, ( either after heavy grazing or a cut )

## **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 15-30 years since establishment

