

Moorgreen Meadows SSSI

Whole Feature Assessment

Natural England July 2023



Features of special interest	Lowland mire grassland and rush pasture Lowland neutral grassland (MG5) Wet woodland Population of declining plant species and species at the edge of their range - <i>Dactylorhiza purpurella</i> , Northern marsh orchid (and hybrids)
Previous assessment	Unfavourable - Recovering 2013
Pressures	Land management – Under-grazing & increasing cover of scrub leading to habitat degradation. Hydrology – drying out of grassland and wet woodland.
Mechanisms & Actions	Specialist advice Land management (capital investment) Options TBA Land management (multi-year) Options TBA



Summary of visit

A CSM Compliant assessment of current condition was conducted using Natural England's Rapid Assessment methodology which is the standard protocol for condition assessment. This is based on the principles set out in Common Standards Monitoring, which is the framework for SSSI condition assessment across the UK. Features of Special Scientific Interest were considered across the whole site with a structured walk and data was collected by Natural England field work at stops along the way. It was not possible to walk the entirety of the units during this monitoring activity. However, effort was made to cover all representative areas of the features present.

Moorgreen meadows SSSI is bounded by different land uses. The features of special interest are the patchwork of neutral meadows, with varying hydrology. Surrounded by historic field boundaries and woodlands. Along with a corridor of alder carr wet woodland following the stream. The citation mentions that sward comprised at least 17 co-dominant herbs and grasses.

Historically managed with cattle, condition of the grassland is declining due to a lack of management with the absence of grazing and scrub control allowing more sensitive habitat to degrade. This is combined with longstanding changes to the hydrology. Despite losing the Northern Marsh Orchid, the range of habitats and characteristic species persist, and recovery is possible.

Feature Assessment

Lowland mire grassland and rush pasture

Lowland neutral grassland (MG5)

The seasonally wet meadows contain a mixture of rush pasture and transitions to neutral / slightly acidic grassland which vary in character depending on underlying hydrology. To the North there are freely draining slightly acid sandy soils, which support the lowland neutral grassland. This changes to slowly permeable, seasonally wet and slightly acidic but base-rich loamy and clayey soils to the South, supporting more lowland mire grassland and rush pasture. The two features occur in a mosaic and were considered together. Extent of both grassland features is declining and below target. Condition of both grassland features was found to have deteriorated from unfavourable recovering to **Unfavourable - declining**. The reasons for this are explained below:

Structure

The average sward height was over the target of 5-15cm, and dominated by coarse, matted grasses. Favourable sward height should be generally short and with low cover of taller, coarse plants. There is a build-up of dead plant matter, which is laying over the field layer and reducing the botanical diversity of the sward. As such, there is very little cover of bare ground, which is acceptable.

Composition

The lowland neutral grassland is becoming rush dominated. There should be no more than 20% cover juncus species. Cover of herbs above 40%, however it is variable, and should be consistently higher. Positive indicator species are present but at low frequency. Marsh thistle and marsh bedstraw are abundant. Punctuated by patches which are more species-rich, containing locally frequent knapweed, tormentil, meadowsweet, small blue/green sedges and greater birds foot trefoil. Some notable species can still be found sporadically, such as orchid spp, devils bit scabious, ragged robin and sneezewort which indicate the potential quality of the grasslands.

The transitions to damp more acidic rush pasture have a different composition with purple moor grass mixed with yellow loosestrife, marsh marigold, water mint, jointed rush and pockets of sphagnum. Moreover, small patches of creeping willow and common heather are interesting components adding to overall diversity. Cover and frequency of negative indicator species is low, although patches of nettles are developing. Tufted hair grass indicates areas of waterlogging and is only found occasionally.

There are glades in the wooded areas which have the potential to contain good quality wood pasture. However, they are under grazed and overgrown.

Cover of trees and scrub, predominantly willow and bramble is over target of 5% and spreading into the grassland, showing habitat is not being managed sufficiently. Cover of invasive non-natives is ok, with one patch of bamboo seen in unit 3 which should not be allowed to spread.

Of note, are the field boundaries lined with consecutive mature oak trees, which provides good habitat for associated invertebrate species. For example, the purple hairstreak butterfly which was seen emerging.

Comments & Management

The grassland features are not being conserved, and the necessary management mechanisms are not in place to allow recovery to favourable condition. The site will not reach favourable condition unless there are changes to site management or external pressures.

The evidence suggests that the site condition is becoming progressively worse. Which is reflected in the results of monitoring over time, as several of the designated features mandatory attributes are not meeting their target, with the results moving further away from the desired state. The longer the SSI features remain in this poor condition, the more difficult it will be, in general, to achieve recovery. It is likely that long-term impacts from changes to the underlying hydrology, on/off site have led to conditions becoming drier. The grassland in unit 2 is receiving appropriate management and recovering towards favourable condition. It must also be noted that part of the feature was historically destroyed in unit 4, restoration may yet be possible but not under the current management. Reinstalment of a sensitive grazing regime and associated infrastructure will aid recovery of the grassland features across the whole site.

Wet woodland

Units 1&2 have a corridor of wet woodland following the stream. The condition of the wet woodland was found to remain in **unfavourable – recovering** condition.

Structure & composition

Left to minimal intervention and dominated by tall, mature alder and willow. The closed canopy results in a characteristically sparse ground flora, with low cover which is dominated by tall umbellifers, sedge, and rush and increasing amounts of bramble, which is above desirable level, and dominates the field layer. Cover of ground flora is therefore below target, wood sorrel, gypsywort and yellow pimpernel are of note. This will also be influenced by ground conditions becoming drier, leading to the wet woodland becoming seasonally wet and not subject to a permanently high water table. Characteristic hydrological conditions are changing, only the stream channel contained water. There are limited signs of regeneration of alder and willow. No Invasive non-natives were seen.

There are also gradients into drier mixed deciduous woodland of oak, alder, and beech canopy with hazel coppice. The majority of which is supporting habitat and site fabric. However, Solomon's seal, wood sorrel, broad-leaved helleborine, hard fern and three-nerved sandwort are notable plants and indicative of ancient character.

Northern marsh orchid *Dactylorhiza purpurella*, (and hybrids)

Feature is no longer relevant. Northern marsh orchid has been absent since 1999 (BSBI database). There is no realistic prospect of natural re-colonisation. Unfavourable – No change.

Unit summary

Units 1&3 have changed from unfavourable recovering to unfavourable declining condition. Failed on sward height, cover of litter, cover of rushes, and cover of trees and scrub and frequency of positive indicator species. Unit 3 has an area of cleared woodland/scrub which is now dominated by bramble. Wet woodland and mixed deciduous woodland are left to non-intervention. There is no evidence of the habitat being managed sufficiently. The grazing infrastructure is dilapidated with fallen fence lines and overgrown water troughs.

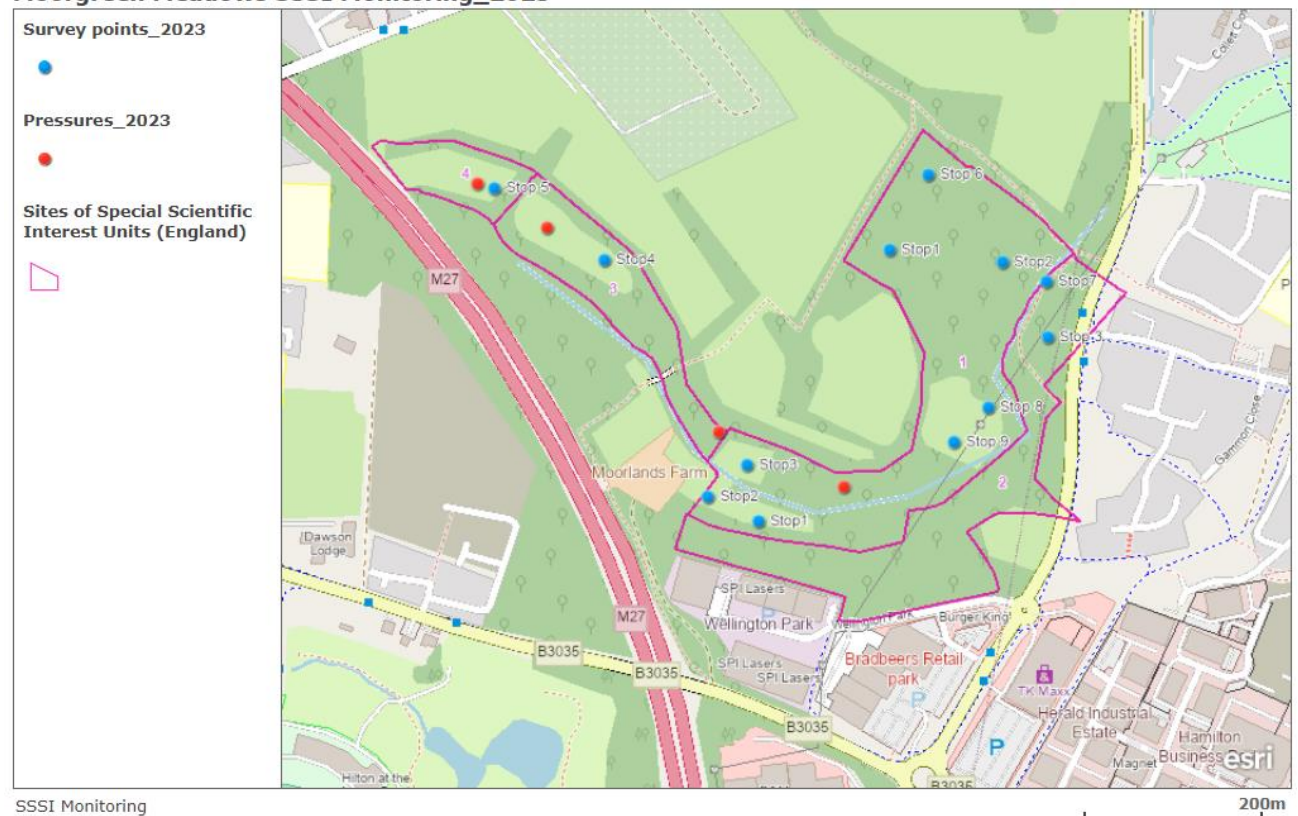
Unit 2 remains in unfavourable – recovering condition. There is an area of rush pasture under the wayleave which is summer grazed by c.12 cattle, which are clearly having a positive impact breaking up the sward height and reducing dominance of undesirable plants. There are frequent positive indicators, black knapweed and meadowsweet and a small group of orchid spp. Fails on cover and frequency of herbs which should increase with the management mechanisms in place to address all causes of unfavourable condition currently impacting features, thus enabling the unit/feature to continue its recovery to favourable condition. Wet woodland and mixed deciduous woodland are

left to minimal intervention. Woodland under the wayleave is cut and creates a scrub corridor which adds diversity and structure.

Unit 4 is Part destroyed. This area was previously destroyed due to stream diversion during construction of M27. Failed on cover of bare ground, sward height, frequency of positive indicator species, proportion of grasses to herbs, and there is also a burn site. The majority is dry, acid grassland which is tightly grazed by ponies. Some botanical diversity remains in the wetter areas and drainage channels with positive indicators like lesser spearwort, tormentil, marsh thistle, marsh bedstraw along with common centuary, showing there are signs of recovery. However, it is not possible to make a judgement on whether this unit is restorable as the unit is not being managed appropriately.

Site map

Moorgreen Meadows SSSI Monitoring_2023



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Photographs

Grassland

Unit 1 – Under
grazed, tall sward
with bramble.



Unit 1 – Potential
wood pasture
under mature oak.



Example of locally
frequent positive
indicators.



Unit 2 - Positive
Impact of grazing
on undesirable
plants.



Unit 1 - Under
grazed and
overgrown rush
pasture



Unit 1 - Build-up
of litter in short
sward.



Unit 3 - Area of
cleared scrub
reverting back
and dominated by
block of bramble.



Unit 4 –
Previously
destroyed. Heavily
grazed.



Wet woodland

Unit 1 - Alder with
bramble
dominated field
layer.



Wet woodland
ground flora



Notable species

Purple hairstreak
– Associated with
the old oak lined
field boundaries.



Heather on acidic
areas



Creeping willow



Lovely old hazel
coppice

