Marches Meadows – Changes Over Time

An Evaluation of Marches Meadow Group's Impact on Local Meadow Quality 2026

Caroline Uff and Rob Rowe



Summary

Marches Meadow Group (MMG) provides advice and a baseline survey for members who own meadows in the local area. Here, twenty meadows have been re-surveyed, some 3-9 years after the initial advice. The results showed a dramatic increase in the quality of over 75% of the re-surveyed meadows – an impressive result against the long-term backdrop of deteriorating quality and loss of traditional meadows UK wide.

Twelve of the 20 meadows at least doubled their number of characteristic high-quality indicator species (i.e. species strongly associated with UK priority habitat grasslands). Two showed a slight decline, but only one meadow showed a marked decline in quality.

Most of the meadows had undergone interventions as a direct result of MMG advice, such as introduction of green-hay, yellow rattle or other seed.

Overall, the comparison suggests that the meadow advice and resulting management / interventions have been highly successful. Species richness has generally increased, populations of characteristic meadow plants have expanded considerably, and most sites now support a more diverse assemblage of high-quality grassland indicators than in the earlier surveys.

This survey was commissioned by Marches Meadow Group and funded by The Marches Meadow Group and Shropshire Hills Landscape Trust.

Contents

Summary 1
1 Introduction 2
2 Methodology 3
3 Results & Analysis 5
3.1 Changes in high-quality Indicator Species 5
3.2 Changes in Desirable Meadow Species 6
3.3 Meadow Management Information and Summary of Ecological Changes 6
3.4 Negative Indicator Species 9
3.5 Species Richness and Herb: Grass Ratio 9
3.6 Interim Surveys 10
3.7 Limitations 10
4 Recommendations for Future Surveys 11
4.1 Abundance 11
4.2 Desirable Species 11
4.3 Other measures of meadow quality 11
5 Appendix 12
5.1 MMG 'Desirable Meadow Species' – Updated List 2026 12
5.2 Boundaries (approx.) of the Areas Surveyed 13
5.3 List of Species Recorded 2026 15
5.4 Field Form 19

1 Introduction

Marches Meadow Group (MMG) was formed in 2015 and has been conducting free plant surveys of members' fields since 2016. These surveys come with a short advisory report suggesting what actions members might take to enhance the diversity of their fields.

This study aims to assess changes in meadow quality since this advice has been given. Twenty meadows, representing a good cross-section of members' sites, were selected for re-survey based on time since the first survey (ideally at least five years), known actions undertaken by owners, and (with one exception) continued MMG membership. Changes in management or significant interventions since the original survey were noted.

The general method used by MMG to assess the meadows was also reviewed and refined to allow for a more robust baseline and measurement of future changes.

2 Methodology

Surveys took place between mid-May and late June. Approximately two hours (x 2 people) were allowed for each survey, which was (as far as possible) in-line with the time spent on the original assessments. Only the meadow habitat was surveyed. Ditches, hedgerows and trees were not included. Emphasis was given to plants that are positive indicators of UK priority grassland habitats: https://www.gov.uk/guidance/species-rich-grassland-indicator-species . The best indicators are referred to as axiophytes and a list of UK and Shropshire axiophytes is published here: https://database.bsbi.org/checklists.php.

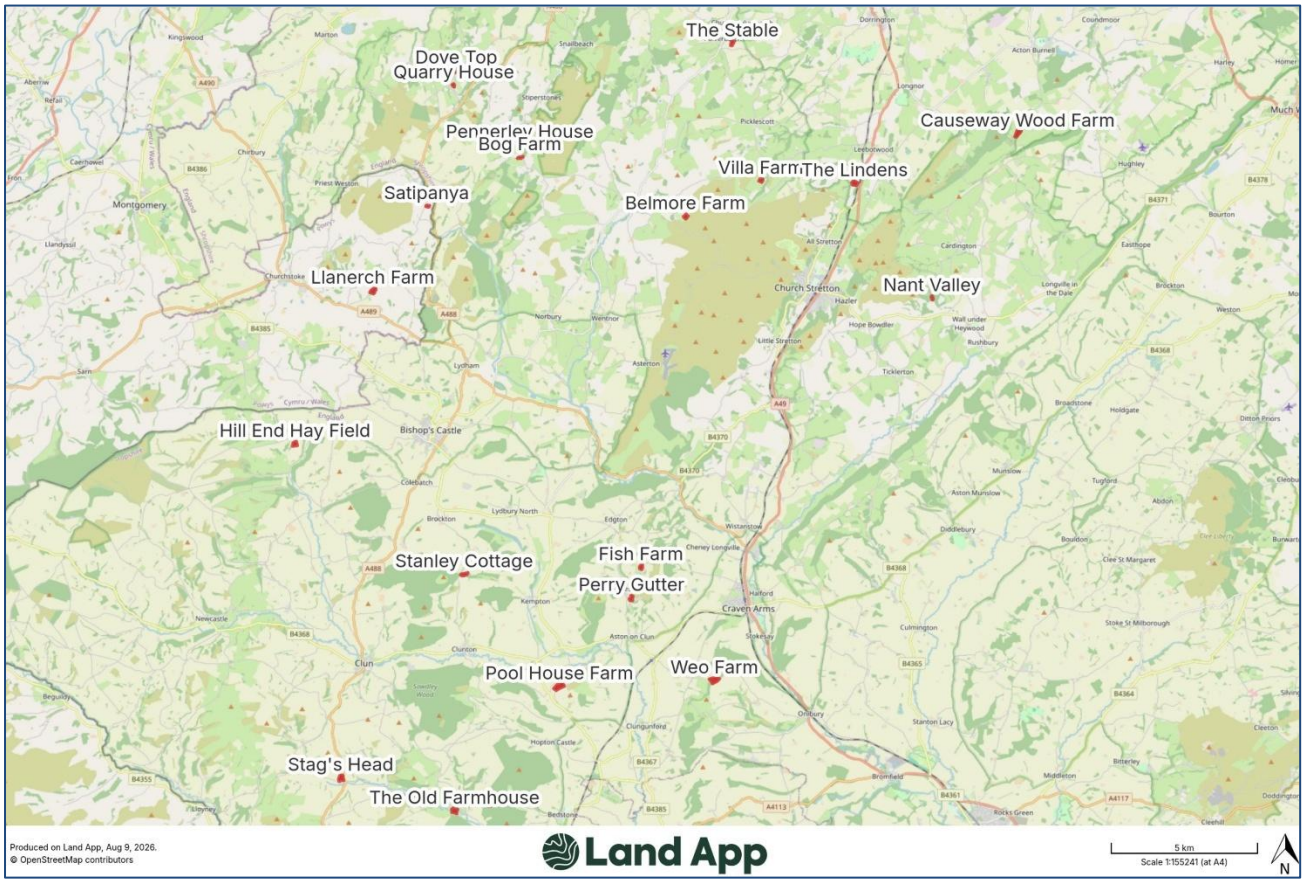
The published lists of positive indicators and axiophytes should not be considered exhaustive, and species considered by the group to be of local significance can justifiably be added. MMG have compiled their own list of 'Desirable Meadow Species' which they use to assign a grade to the quality of the meadow. This list includes a wider range of species than those mentioned in the previous paragraph and includes widespread species indicative of good semi-improved grassland. MMG's list was reviewed as part of the current assessment (section 4.2 & 5.1).

One field from each of the selected sites was chosen for survey. The average field size surveyed was approx. 1.5ha, and just under 30ha were assessed in total. If time allowed, data were collected from additional fields on the holdings (although not in such detail). This usually showed a similar trend to the main target meadow on the same property. These additional data are not included in the analysis but will be provided separately to MMG.

Site Name	Location	Central Grid Reference of Field	Initial Survey	Notes
Belmore Farm (4 Acre Field)	Ratlinghope	SO41129623	2019	Field 3 (Drive) also surveyed
Bog Farm	The Bog	SO35429826	2021	
Causeway Wood Farm	Acton Burnell	SO52569909	2021	
Dove Top (Field 1)	Bentlawnt	SJ33220124	2022	Other fields also surveyed
Fish Farm (Bottom Field)	The Fish	SO39598415	2018	Top field also surveyed
Hill End Farm (Hay Meadow)	Mainstone	SO27658840	2020	
Llanerch Farm	Hyssington	SO30359367	2020	
Nant Valley	Wall-under-Heywood	SO49629343	2023	
Pennerley House (Drive Meadow)	Pennerley	SO35419870	2018	Field 2 also surveyed
Perry Gutter (Fence Area)	Hopesay	SO39258308	2018	
Pool House Farm (Field 1&2)	Clunbury	SO36748004	2018	Other fields also surveyed (walk-over)
Quarry House (Field 1)	Gravelsbank	SJ33120076	2023	Other fields also surveyed
Satipanya (Within Cut Paths)	White Grit	SO32229659	2015	
Stags Head (Main Meadow excluding tumps)	New Invention	SO29247688	2020	Other fields also surveyed (walk-over)
Stanley Cottage	Lower Down	SO33508390	2017	Other fields also surveyed (walk – over)
The Lindens	Lower Wood	SO46949738	2020	Recreation area also surveyed (walk-over)
The Old Farmhouse	Lower Lye	SO33157574	2020	
The Stable (Field 1)	Pulverbatch	SJ42720221	2017	Other fields also surveyed
Villa Farm (Hay Meadow)	High Park	SO43729747	2020	Large field also part surveyed (walk-over)
Weo Farm	Rowton	SO42118026	2019	

The main surveyors were Caroline Uff and Rob Rowe, with additional help from Kat White. Rob was also the surveyor in many of the original surveys, providing an element of consistency.

The map below shows the distribution of the holdings – roughly centred around the Bishop's Castle, Craven Arms and Church Stretton area. The extent of each field surveyed is given in appendix 5.2.



A two-pronged approached was taken for each survey:

Species abundance was assessed by carrying out a structured 'w' walk across the main body of the meadow, with 10 regularly spaced stops. At each stop all higher plant species (but not woody species) were recorded in the immediate area (roughly 1m^2). As well as creating a species list this also allows abundance to be assessed (see sections 4.1 & 5.3). This methodology is a widely recognised approach used and adapted by many organisation and schemes. The field form used in this project is given in the appendix 5.4. Any species noted that did not fall into a quadrat, or were picked up in the general walkover, or had been reliably noted by the landowner around the time of survey, were included in the list with an abundance score of 'rare'.

A general walkover and landowner liaison was carried out to add species that may have be missed in the structured survey. This was often carried out alongside the landowner and provided an opportunity to discuss management, offer encouragement, and help with plant identification. If owners were present, they were asked about any interventions / management carried out since the initial survey.

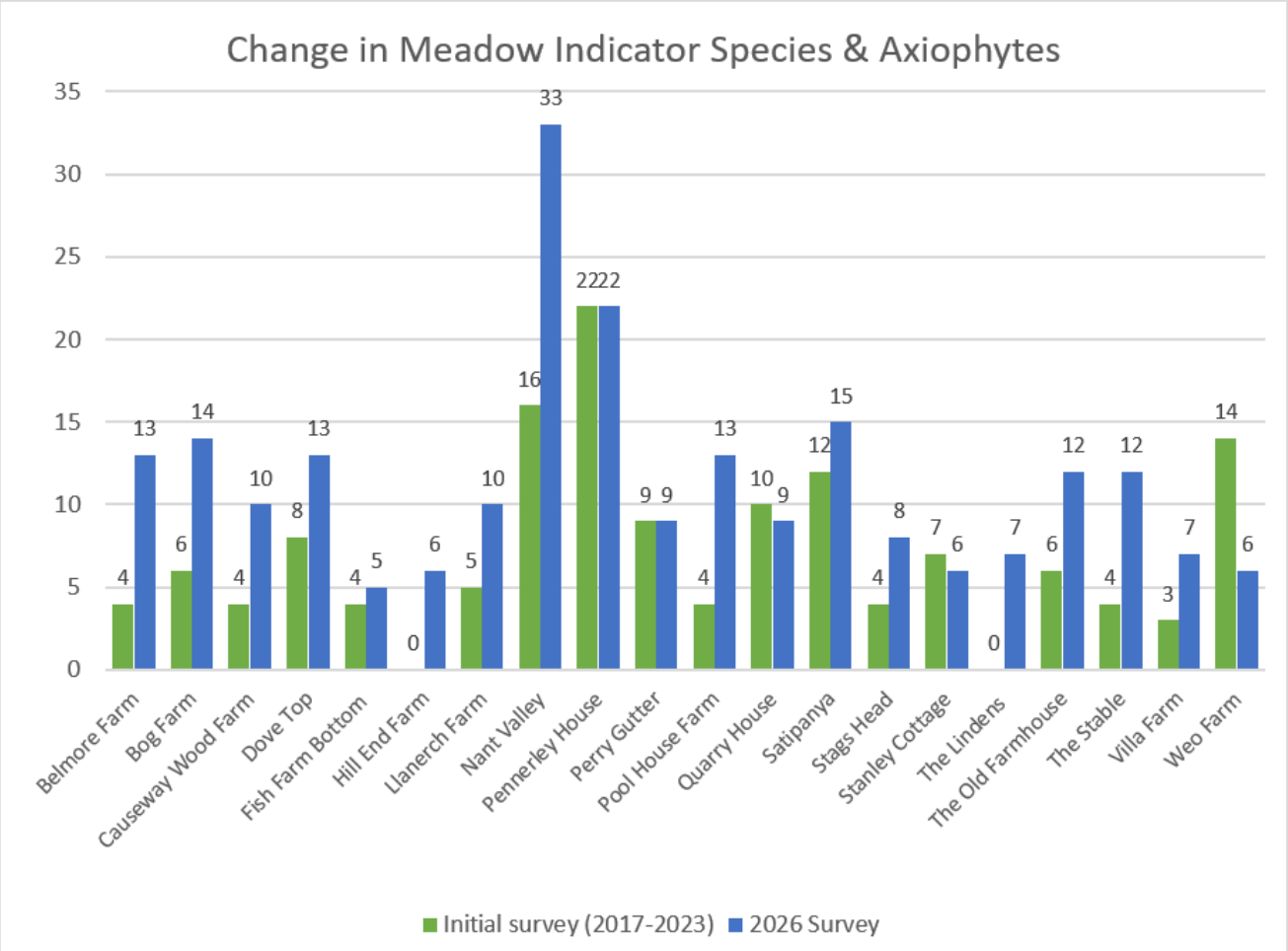
Analysis of data. Changes were measured by comparing the list compiled in 2026 (appendix 5.3) **with the earliest available list** for each site. The analysis focused on high-quality meadow indicator species as well as a broader range of desirable meadow species.

Many of the original site lists have been added-to in the interim years through repeat surveys or casual records. However, for the purpose of this report, and for constancy in terms of comparable survey effort, these additional records were not used in the main analysis (but see section 3.6).

3 Results & Analysis

3.1 Changes in high-quality Indicator Species

The 2026 surveys indicate a clear positive trend in characteristic meadow species and habitat quality. Most meadows showed an increase in positive indicator species, gaining characteristic species of UK priority habitat grasslands (in particular, lowland meadows). Particularly encouraging were the increased recordings of positive indicator species such as yellow rattle, eyebright, orchids, bird's-foot-trefoils, hawkbits, meadow vetchling, betony, pignut, goat's-beard, sneezewort, ragged robin and changing forget-me-not, all of which are associated with traditionally managed, low-fertility meadows. In many cases, these species will have been introduced by the strewing of green-hay or yellow rattle, on advice from MMG.



Of the 20 meadows chosen for the trial:

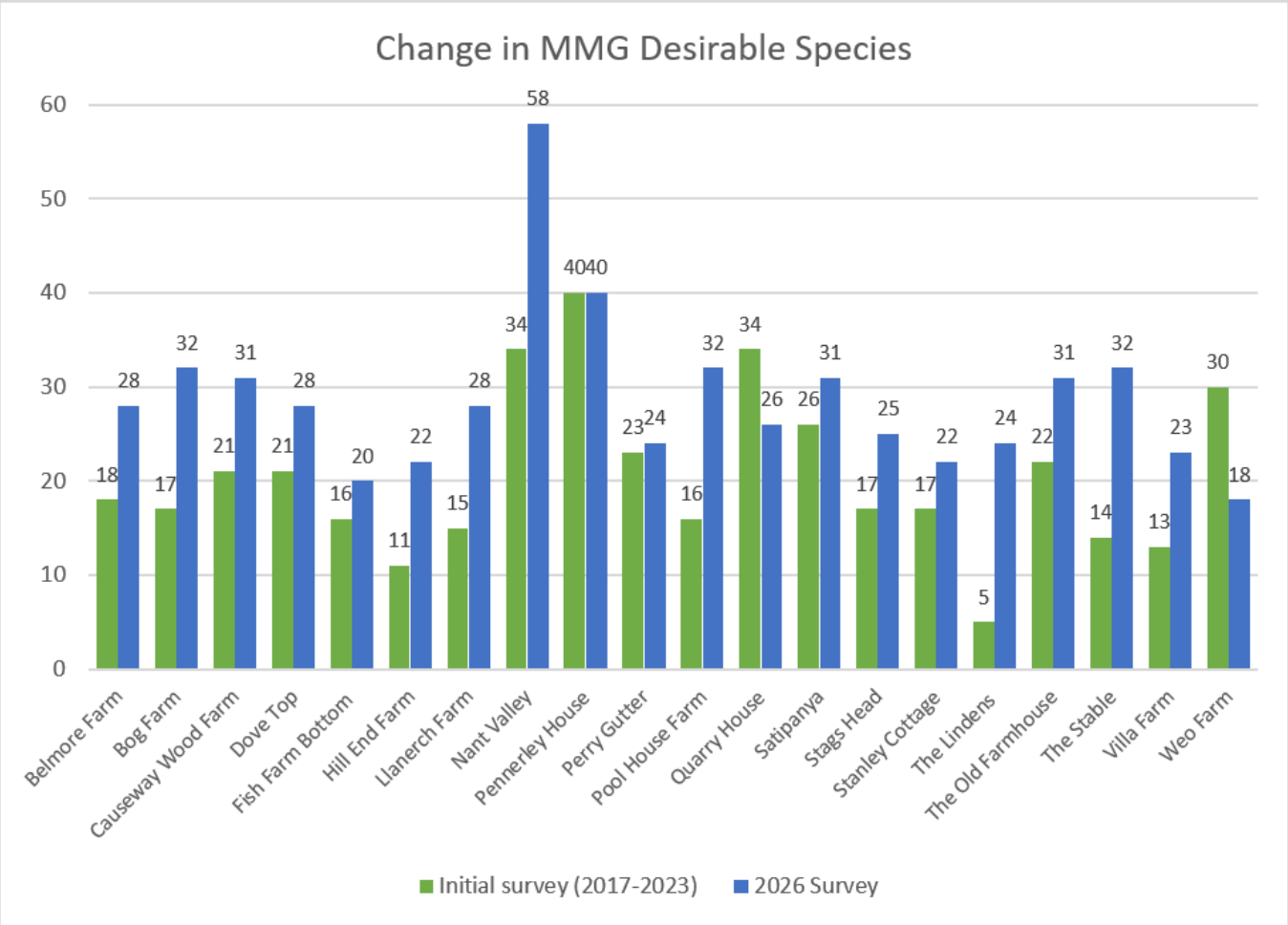
- Fifteen showed an increase in characteristic meadow species, 12 of which had at least doubled their number of meadow indicator species since the original survey
- Two meadows appeared stable (Pennerley House and Perry Gutter)
- Two showed a slight decline (Quarry House Meadow 1 and Stanley Cottage)
- Only 1 site, Weo Farm, showed a marked decline.

A breakdown of the key species gains and losses for each meadow, along with recent management and interventions, is given in section 3.3.

3.2 Changes in Desirable Meadow Species

Changes in the presence of desirable species (MMG List) were also assessed. These showed similar, but proportionally less dramatic results. This was unsurprising due to the inclusion of widespread species likely present before and after interventions.

Seventeen showed an increase in desirable species, one appeared stable (Pennerley House Drive), and two showed a more marked decline (Quarry House and Weo Farm).



3.3 Meadow Management Information and Summary of Ecological Changes

Field Name and Management (the approximate area surveyed is given in brackets)	Meadow change summary (ecological improvement or decline)
Belmore Farm: '4-acre Field' (1.14ha) **Initial survey and advice 2019** In most years since, a hay cut was taken (late July/Aug) with aftermath grazing. Yellow rattle introduced in 2019, and green hay and /or seed introduced on several occasions from multiple sites. Records are kept by the owner detailing the annual management and interventions.	**Strong improvement.** Notable gains of betony, common / heath spotted-orchid, yellow rattle, yellow oat-grass, autumn hawkbit, rough hawkbit, pignut, oxeye daisy, tormentil, eyebright and common knapweed. Possible loss of greater bird's-foot-trefoil, sheep's fescue and heath bedstraw, but overall, the quality has increased. It is likely that the heath bedstraw and sheep's fescue were previously recorded on the top bank which is now fenced out. Negative indicators had declined.

Bog Farm (0.45ha) **Initial survey and advice 2021** Bare ground over half of the meadow (created by building works prior to the 2021 survey) was reseeded with a meadow seed mix but with poor germination. Subsequently green hay and plugs of devil's-bit scabious and cowslip were introduced. Managed by a variety of cuts and occasional short bursts of grazing.	**Strong improvement.** Notable gains of green-winged orchid, common spotted-orchid, yellow rattle, greater bird's-foot-trefoil, cowslip, sneezewort, ragged robin, autumn hawkbit, and rough hawkbit. Possible loss of changing forget-me-not and tormentil. 400 common spotted orchids counted. The re-seeded area (northern strip) is significantly more diverse with more high-quality indicators than the southern area and up to 18spp/stop.
Causeway Wood Farm: Hay Meadow (2.38ha) **Initial survey and advice 2021** The meadow is usually cut in July with light aftermath grazing. Green hay, yellow rattle, and plugs of oxeye daisy (and other species) have been introduced since 2021.	**Strong improvement.** Notable gains of autumn hawkbit, common knapweed, oxeye daisy, rough hawkbit and yellow rattle. Adder's tongue was a significant new record as it is an indicator of ancient grasslands (likely overlooked in 2021). Possible loss of changing forget-me-not.
Dove Top: Field 1 (0.35ha) **Initial survey and advice 2022** Annual hay cut (late summer) introduced following the 2022 survey, with brief aftermath grazing. The northern end of the meadow is difficult to access with machinery and is not cut.	**Strong improvement.** Notable gains of burnet-saxifrage, changing forget-me-not, quaking grass, yellow rattle, greater bird's-foot trefoil and meadow vetchling. The owner said that the number of orchids had increased over the site, but still low numbers (c5 over meadows 1&2 combined). A higher proportion of coarse species in the northern end. Possible loss of mouse-ear hawkweed.
Fish Farm: Bottom Field (1.05ha) **Initial survey and advice 2018** Light grazing by sheep and goats	**Slight improvement.** Gains of bugle (edge), common knapweed, oval sedge and pignut. Possible loss of greater bird's-foot-trefoil, trailing tormentil and lady's-mantle (*sp.* Unknown).
Hill End Farm: Hay Meadow (1.7ha) **Initial survey and advice 2020** The meadow has since been managed by an annual hay cut in summer with aftermath grazing by sheep. In 2020 green hay was spread and in 2022 oxeye daisy seed sown.	**Strong improvement.** Noteworthy gains of common bird's-foot-trefoil, common knapweed, goat's-beard, yellow rattle, meadow vetchling and a single oxeye daisy. No noteworthy losses, but eyebright was recorded in an interim survey (2022) but not re-recorded.
Llanerch Farm (1.97ha) **Initial survey and advice 2020** The meadow has since been managed by an annual hay cut (Jun to Aug), usually with aftermath grazing by horses and sheep (not 2025). Green hay was strewn (c2021) on the southeastern bank.	**Strong improvement.** Noteworthy gains of changing forget-me-not, eyebright, goat's-beard, meadow vetchling and rough hawkbit. Although yellow rattle was noted as present in 2020, it is now abundant throughout the meadow. There were no obvious losses. The owner noted that the number of common spotted-orchids had increased from 1 or 2 in 2020 but still relatively low numbers (c10).
Nant Valley (0.46ha) **Initial survey and advice 2023** In 2020/2021 turf had been stripped over part of the site. A seed mix including Yellow Rattle, Oxeye Daisy, and Viper's Bugloss was then introduced. Since then, green hay and plugs have been added from several sources. The meadow is managed by cutting in October and is not grazed.	**Strong improvement.** The most diverse site in the study with many grassland indicator species (14 axiophytes!). Gains (on top of the already rich list) include agrimony, betony, devil's-bit scabious, dyer's greenweed, common spotted-orchid (60+), eyebright, field scabious, goat's-beard, greater bird's-foot-trefoil, heath speedwell, meadow vetchling, pignut, prickly sedge, ragged robin, sheep's sorrel, sneezewort, slender st john's-wort and wood sage. There were no noteworthy losses. Some introduced species were not yet fully established and included indicators of both acid and calcareous grasslands, so diversity may reduce in the long term as the meadow finds its natural balance.
Pennerley House: Drive (0.26ha) **Initial survey and advice 2018** Green hay was spread between 2015-2017 with some additional common spotted-orchid seed added. Cut annually for hay with aftermath grazing simulated by mowing and collection with ride-on mower.	**Stable.** An extremely rich and diverse site with gains of heath spotted-orchid (possibly hybrid), field scabious, oxeye daisy, autumn hawkbit, greater bird's-foot-trefoil, hedge bedstraw, ragged robin and sneezewort. However, the survey showed possible losses of sheep's-sorrel, tormentil, oval sedge, smooth catsear, devil's-bit scabious, creeping forget-me-not, greater knapweed. Bugle and southern marsh-orchid had been noted since 2018 but were not picked up in 2026.

Perry Gutter (1.18ha) **Initial survey and advice 2018** The MMG list was based on a list put together by SWT in 2016 with additions in 2018. The meadow is cut for hay in July with aftermath grazing Sept-Jan. Yellow rattle was added in 2016 and green hay in 2017 with some more recent planting of devils-bit scabious plugs.	**Stable /slight increase.** Eyebright, meadow vetchling and common bird's-foot-trefoil were noteworthy additions. Marsh bedstraw, meadowsweet and bluebell were possibly lost from the meadow, but this may be due to slight differences in the survey area with earlier surveys including the ditch.
Pool House Farm: Fields 1&2 (3.89ha) **Initial survey and advice 2018** Green hay and yellow rattle added in a strip (NW field1) in 2023. In recent years grazed overnight by 3 ponies (Nov-Apr).	**Strong improvement since 2018 but slight recent decline.** Noteworthy gains of southern marsh orchid (x1), common knapweed, yellow rattle, greater bird's-foot-trefoil, meadow vetchling, mouse-ear-hawkweed, oxeye daisy, tormentil, ragged robin. No notable losses. The western-most of the two fields is slightly less diverse with more coarse species.
Quarry House 1 (0.38ha) **Initial survey and advice 2023** The 2023 survey was used for comparison, but an earlier survey had been carried out in 2016 which did not separate the fields. The fields are mown annually for hay and the aftermath sheep grazed.	**Decline.** There appeared to be an overall slight decline in the diversity of this meadow since 2023, including the possible loss of glaucous sedge, meadow vetchling, meadowsweet and yellow oatgrass. Notable gains included changing forget-me-not, greater bird's-foot-trefoil and pignut.
Satipanya (0.34ha) **Initial survey and advice 2015/ 2020** Although the MMG assessment was done in 2020, a prior survey, carried out in 2015, was used for comparison. Green hay was introduced around 2018 and the meadows are cut for hay.	**Moderate improvement.** Noteworthy gains are common & heath spotted-orchid, eyebright and pignut but a possible loss was tormentil. Note: the survey covered both fields as in 2015 but in 2026 was restricted to the 'meadow' area within the mown path.
Stags Head (2.26ha) **Initial survey and advice 2020** Hay cut taken each year. Aftermath grazing with sheep.	**Strong improvement.** Noteworthy gains were changing forget-me-not, spring sedge, lady's bedstraw, early hairgrass and mouse-ear-hawkweed (some of these were on the boundary between the tumps and the meadow). Pignut was not recorded in the main meadow area. Moonwort, recorded historically, was not seen in 2026.
Stanley Cottage (1.25ha) **Initial survey and advice 2017** Yellow rattle and some meadow mix introduced approx. 5 years ago. Annual hay cut followed by aftermath grazing and occasional spring grazing.	**Broadly stable but mixed results**. There appeared to be a slight loss of high-quality indicators. This may be explained as the original survey may have included the wet ditch (losses of meadowsweet, oval sedge, and greater bird's-foot-trefoil). The apparent loss of meadow vetchling and yellow oat-grass was more significant, but the latter is hard to find when not in flower. The gains were autumn hawkbit, changing forget-me-not, common bird's-foot-trefoil and oxeye daisy.
The Lindens (2.10ha) **Initial survey and advice 2020** Yellow Rattle and other seed spread in 2020. Annual hay cut late summer with aftermath grazing.	**Strong improvement.** This meadow had gained a significant number of meadow species with noteworthy gains including yellow rattle, oxeye daisy, common knapweed, changing forget-me-not, salad burnet, rough hawkbit. Cornflower was also noted, likely from a seed mix, but is unlikely to persist as it is not really a meadow species. There were no losses of meadow species.
The Old Farmhouse (2.17ha) **Initial survey and advice 2020** Some rattle seed spread 2020, but no other additions. Annual hay cut since 2019 with aftermath grazing for a month or so.	**Strong improvement.** Noteworthy gains were yellow rattle (patch near entrance only), bluebell, bugle, changing forget-me-not, common knapweed, cowslip and meadow saxifrage. The owners noted that the number of pignut plants had increased from 1 to over 10. Marsh bedstraw was the only possible noteworthy loss.
The Stable (1.02ha) **Initial survey and advice 2017** Field one is managed by a combination of hay cutting and grazing.	**Strong improvement.** Noteworthy gains included eyebright, changing forget-me-not, common spotted-orchid (x1), autumn hawkbit, yellow oat-grass, greater bird's-foot-trefoil, meadow vetchling and oval sedge. No indicator species were lost. The lower slope is the most diverse area.

Villa Farm Hay Field (0.88ha) **Initial survey and advice 2020** Hay is taken every two years - otherwise grazed.	**Strong improvement.** Noteworthy gains of lady's bedstraw, meadow vetchling, yellow rattle, common bird's-foot-trefoil, star sedge and tormentil. The loss of lady's-mantle is outweighed by numerous positive gains albeit at low frequency. The diverse area is restricted to the southeast with areas in the northwest relatively poor and showing frequent signs of nutrient enrichment.
Weo Farm (3.61ha) **Initial survey and advice 2019** (carried out by 4 people) In was last cut for hay in 2019. It has since been grazed by cattle periodically, but lack of water is an issue. Some scything of bracken has taken place to try and keep it in check.	**Marked decline.** This site appears to have declined in both diversity and quality with possible loss of barren strawberry, bluebell, broad-leaved helleborine, yellow rattle, common spotted-orchid, harebell, heath bedstraw, lady's bedstraw and tormentil. Marsh bedstraw was the only indicator species added. It appears that the acid loving herbs that were at the top of the site have been lost to coarser species such as bracken and cock's-foot.

3.4 Negative Indicator Species

Negative indicators such as nettle, creeping thistle, and dock tended to be present along the meadow edges on most sites. Without abundance it was not possible to know whether they have increased or declined within the meadow itself, or whether the results simply reflect how much 'edge' was included in the survey. However, the number of negative indicators appeared to have declined in 11 sites, were stable in 3, and increased in 6. A decline of negative indicators reflects positive management with appropriate weed control.

3.5 Species Richness and Herb: Grass Ratio

The average number of species per stop and the average herb:grass ratio is not included in the analysis as there is no historic data for comparison. However, the information may be useful for future comparisons. These measures are often used to help determine the grassland type for agri-environment purposes. For example, Priority Habitat Lowland Meadows should ideally have at least 15 species/m2 and over 30% herbs (including sedges but excluding white clover, creeping buttercup and injurious weeds). The herb:grass ratio is a rough visual assessment based upon cover.

Site Name	Species per m2	% Herbs & Sedges
Belmore Farm (4 Acre Field)	16.2	70%
Bog Farm	12.8	47%
Causeway Wood Farm	15.8	35%
Dove Top (Field 1)	13.8	30%
Fish Farm (Bottom Field)	14.3	20%
Hill End Farm (Hay Meadow)	16.9	60%
Llanerch Farm	18.1	65%
Nant Valley	21.5	85%
Pennerley House (Drive)	17.4	70%
Perry Gutter (Fence Area)	17.1	70%
Pool House Farm (Field 1&2)	13.3	35%
Quarry House (Field 1)	17.2	30%
Satipanya (Within Cut Paths)	15.7	75%
Stags Head (Main Meadow)	14.9	50%
Stanley Cottage	14.5	60%
The Lindens	15.7	60%
The Old Farmhouse	17.1	30%
The Stable (Field 1)	19.0	50%
Villa Farm (Hay Meadow)	11.9	20%
Weo Farm	10.8	30%

3.6 Interim Surveys

Nine of the sites had additional species recorded between the original and current surveys. Richard Small compared the 2026 survey results with the accumulated lists using the MMG criteria. Although not absolutely comparable due to differences in recording effort and times of year (the accumulated lists would be anticipated to be larger), the following observations were made.

- Belmore and Hillend had the same number of desirable species as the previous combined list.
- Llanerch Farm and Villa Farm still showed an increase in meadow species.
- Pennerley House and Quarry House showed a decrease in meadow species.
- Pool House Farm also showed a slight decrease which was more unexpected. Upon closer examination of the various surveys, this may indicate that the meadow had improved in the short term but now is starting to decline.
- Perry Gutter and Stags Head showed a decline, but upon closer examination this can be accounted for by the surveys covering differing areas. For future comparative assessments these glitches can be ironed out by using the reference maps of the areas surveyed in 2026 (included in appendix 5.2).

3.7 Limitations

The comparisons with earlier surveys should be treated with some caution as the area covered by the original survey was not always clear, and may have included species from ditches, hedges or other parts of the holding such as banks or planted up areas that have since been fenced off. For example, in Perry Gutter the original survey was carried out by Shropshire Wildlife Trust and the area they covered was larger. To some extent these non-meadow areas could be recognised and excluded from the comparison, but in any case, they are unlikely to significantly affect the changes in meadow indicator species. In the current survey only the meadow area was assessed.

Time of year, weather conditions (e.g. drought) and experience / number of surveyors will also result in some variations between survey results, and this is not considered in the comparisons. But most surveys were done between late May and early July, and usually (but not always) with 2 experienced surveyors, so should be broadly comparable.

4 Recommendations for Future Surveys

As part of the project, a review of the survey method and reference lists used by MMG was requested. The MMG surveys currently provide a comprehensive species list for each field, and the report includes a clear and useful summary and practical management advice (with links to further information). This approach is good and there seems no reason to change it significantly. However, the following should be considered.

4.1 Abundance

Earlier surveys rarely included any indications of species abundance. It is recommended that this is added to any future surveys – at least for the positive, desirable, and negative indicator species (I believe this is already being put in place). This allows for a much more sensitive indicator of change in the future. It should not be onerous. For the current survey a structured walk with 10 quadrats was used to provide a robust baseline of all species (see appendix 5.4 for field form used), but this is not essential and a less onerous assessment of abundance of key indicators, summarised below, will be just as valuable in future.

- Abundant (A) – It's everywhere! (80% or more stops)
- Frequent (F) - it can be found very easily without searching. (50-79% of stops)
- Occasional (O) - it can be found quite quickly but with some searching. (20-49% of stops)
- Rare (R) - it is present but hard to find. (<20% of stops)

4.2 Desirable Species

The MMG list of desirable meadow species was reviewed and updated to include some additional species.

These additions include high-quality indicator species, such as bluebell and tormentil, which although not classically associated with meadows, are a feature of many meadows in the Welsh Marches.

Currently, axiophytes are highlighted in the reports given to owners, but other key positive indicators are only mentioned in the text. It would be useful to simply highlight these along with the axiophytes in the report lists as they relate directly to the species used by DEFRA / Natural England to determine grassland habitat quality.

A revised list of desirable species, with axiophytes and indicators of priority habitats in bold, are given in appendix 5.1. This list is based on species found on MMG members' fields. It is not exhaustive and can be added to. For example, any axiophytes or indicators of priority habitat grassland that are recorded in future should be added (see section 2 for hyperlinks). This includes any native orchid.

4.3 Other measures of meadow quality

Two other useful attributes to note, if time allows, are the average herb:grass ratio and the average number of species per stop. Along with the abundance of indicator species, these are also used by DEFRA to help determine grassland quality for agri-environmental purposes. This information was collected for the current survey (section 3.5), but as it had not been collected previous surveys no comparison could be made. It may be too onerous to assess for all sites but should be included in periodic reviews, such as this.

An orchid count is an easy and enjoyable exercise which is often done, for interest, by the owners. This was recorded in some sites during the current survey, but with hindsight should have been noted for all orchid sites. Where sites have large numbers of orchids broad estimates can be used.

5 Appendix

5.1 MMG 'Desirable Meadow Species' – Updated List 2026

Indicators of UK Priority Habitat Grasslands are given in bold

Common name	***Species name***		**Common name**	**Species name**
Yarrow	*Achillea millefolium*		**Rough hawkbit**	***Leontodon hispidus***
Sneezewort	***Achillea ptarmica***		**Field Pepperwort**	***Lepidium campestre***
Agrimony	***Agrimonia eupatoria***		**Oxeye daisy**	***Leucanthemum vulgare***
Bugle	***Ajuga reptans***		**Fairy flax**	***Linum catharticum***
Lady's-mantle (aggregate)	***Alchemilla vulgaris agg.***		**Common bird's-foot-trefoil**	***Lotus corniculatus***
Meadow foxtail	*Alopecurus pratensis*		**Greater bird's-foot-trefoil**	***Lotus pedunculatus***
Green-winged orchid	***Anacamptis morio***		Field wood-rush	*Luzula campestris*
Wild angelica	*Angelica sylvestris*		Musk mallow	*Malva moschata*
Sweet vernal grass	*Anthoxanthum odoratum*		Black medick	*Medicago lupulina*
Kidney Vetch	***Anthyllis vulneraria***		**Changing forget-me-not**	***Myosotis discolor***
Yellow-wort	***Blackstonia perfoliata***		**Twayblade (any)**	***Neottia sp.***
Moonwort	***Botrychium lunaria***		**Common Restharrow**	***Ononis repens***
Quaking-grass	***Briza media***		**Adder's-tongue**	***Ophioglossum vulgatum***
Harebell	***Campanula rotundifolia***		Broomrape (any)	*Orobanche sp.*
Cuckooflower	*Cardamine pratensis*		**Mouse-ear-hawkweed**	***Pilosella officinarum***
Sedges (any small/medium blue-green)	***Carex sp.***		**Burnet-saxifrage**	***Pimpinella saxifraga***
Common knapweed	***Centaurea nigra***		Ribwort plantain	*Plantago lanceolata*
Common Centaury	***Centaurium erythraea***		**Greater butterfly-orchid**	***Platanthera chlorantha***
Melancholy Thistle	*Cirsium heterophyllum*		**Trailing tormentil**	***Potentilla anglica***
Meadow Saffron	***Colchicum autumnale***		**Tormentil**	***Potentilla erecta***
Pignut	***Conopodium majus***		Creeping cinquefoil	*Potentilla reptans*
Smooth hawksbeard	*Crepis capillaris*		**Barren strawberry**	***Potentilla sterilis***
Crosswort	*Cruciata laevipes*		**Cowslip**	***Primula veris***
Crested dog's tail	*Cynosurus cristatus*		Selfheal	*Prunella vulgaris*
Common spotted-orchid	***Dactylorhiza fuchsii***		Fleabane	*Pulicaria dysenterica*
Heath spotted-orchid	***Dactylorhiza maculata***		Meadow buttercup	*Ranunculus acris*
Southern marsh-orchid	***Dactylorhiza praetermissa***		Bulbous buttercup	*Ranunculus bulbosus*
Heath-grass	***Danthonia decumbens***		**Yellow rattle**	***Rhinanthus minor***
Wild carrot	*Daucus carota*		Common sorrel	*Rumex acetosa*
Viper's-bugloss	***Echium vulgare***		**Sheep's sorrel**	***Rumex acetosella***
Broad-leaved helleborine	***Epipactis helleborine***		**Salad burnet**	***Sanguisorba minor***
Eyebright	***Euphrasia officinalis agg.***		**Great Burnet**	***Sanguisorba officinalis***
Red fescue	*Festuca rubra*		**Meadow saxifrage**	***Saxifraga granulata***
Meadowsweet	***Filipendula ulmaria***		**Ragged-robin**	***Silene flos-cuculi***
Wild Strawberry	***Fragaria vesca***		**Betony**	***Stachys officinalis***
Hedge bedstraw	***Galium album***		Lesser stitchwort	*Stellaria graminea*
Marsh bedstraw	***Galium palustre***		**Devil's-bit scabious**	***Succisa pratensis***
Heath bedstraw	***Galium saxatile***		**Goat's-beard**	***Tragopogon pratensis***
Lady's bedstraw	***Galium verum***		Hop Trefoil	*Trifolium campestre*
Dyer's greenweed	***Genista tinctoria***		Lesser trefoil	*Trifolium dubium*
Dove's-foot crane's-bill	*Geranium molle*		Zigzag clover	*Trifolium medium*
Meadow cranesbill	*Geranium pratense*		Red clover	*Trifolium pratense*
Hawkweed (any)	***Hieracium sp.***		**Yellow oat-grass**	***Trisetum flavescens***
Bluebell	***Hyacinthoides non-scripta***		Wall speedwell	*Veronica arvensis*
Trailing st John's-wort	***Hypericum humifusum***		Germander speedwell	*Veronica chamaedrys*
Imperforate st John's-wort	***Hypericum maculatum***		**Heath speedwell**	***Veronica officinalis***
Slender St John's-wort	*Hypericum pulchrum*		Thyme-leaved speedwell	*Veronica serpyllifolia*
Smooth cat's-ear	***Hypochaeris glabra***		Tufted vetch	*Vicia cracca*
Common catsear	*Hypochaeris radicata*		Hairy tare	*Vicia hirsuta*
Jointed rush	*Juncus articulatus*		Common vetch	*Vicia sativa*
Field scabious	***Knautia arvensis***		Bush vetch	*Vicia sepium*
Bitter-vetch	***Lathyrus linifolius***		Smooth tare	*Vicia tetrasperma*
Meadow vetchling	***Lathyrus pratensis***		Violet (any)	*Viola sp.*
Autumn hawkbit	***Leontodon autumnalis***			

5.2 Boundaries of the Areas Surveyed

Boundaries (in red) are approximate only and not to scale.





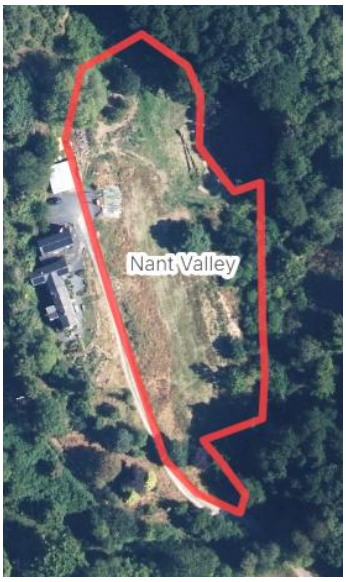













Pennerley House


Perry Gutter


Pool House Farm


Quarry House


Satipanya


Stag's Head


Stanley Cottage


The Old Farmhouse


The Stable


Villa Farm


Weo Farm

5.3 List of Species Recorded 2026

The following table shows the abundance of all species recorded in the meadows in 2026. These are also available as an excel spreadsheet with scientific names. A=abundant, F=frequent, O=occasional, R= rare.

	Belmore Farm	Bog Farm	Causeway Wood Fm	Dove Top 1	Fish Farm Bottom	Hill End Farm	Llanerch Farm	Nant Valley	Pennerley House Dr	Perry Gutter	Pool House Farm	Quarry House 1	Saltypanya	Stags Head	Stanley Cottage	The Lindens	The Old Farmhouse	The Stables	Villa Farm	Weo Farm
adder's-tongue			R																	
agrimony								R												
American willowherb		R																		
annual meadow-grass								R		R	R									
autumn hawkbit	O	R	R					O	R		R	O		O	O		O	R		
bearded couch																				
betony	R	R						R												
black medick									R											
bladder campion								R												
bluebell				R				R	R								R			
bog stitchwort					R															
bracken	R		R	O				R				R								O
bramble																				R
broad-leaved dock		O	R		O		R				R	R	R		R	O	R	R		R
broad-leaved willowherb								O												
broom								O												
bugle					R												R			
bulbous buttercup	F		O	F			O				F	F		A	A	O	A	F	F	
burnet-saxifrage				R																
bush vetch					R						R							R		
changing forget-me-not				R			O	R		A	R	O	R	R	R	O	F	R		
chickweed											R									
cleavers			R	R	R			R	R	R	R							R	R	
clustered dock										R										
cock's-foot	A	O	R	A	F	O	O	F	O	O	F	A	F	R	F	A	F	A	R	A
columbine								R												
common bent	A	A	A	A	O	A	A	F	A	F	A	O	A	A	A	A	A	F	A	A
common bird's-foot-trefoil	R	O	R	F	R	R	O	O	R	R	R	O	R	O	R			R	R	F
common catsear	A	O	O	O		F	O	O	O	R	R	F	F	O	F	R	R	R	O	R
common cudweed																				
common dog-violet						R		R							R					
common figwort								R												
common gorse																				
common knapweed	R	F	O	A	R	O	R	F	A		R	R	A		R	O	R	F		
common mouse-ear	A	F	O	R	A	F	F	O	R	F	F	O	O	F	A	O	F	A	F	R
common nettle		R			O		R	R	R	R	R	R		R	R				O	R
common sorrel	F	F	F	A	F	F	A	F	A	A	A	A	O	F	O	O	F	A	F	O
common spotted-orchid	R	O		R			R	O	F				O					R		
common vetch			R					R	R			O				R		R		
compact rush										R								R	R	
cornflower																R				
couch grass														R	R					
cow parsley			R															R		
cowslip		R							R				O				R			

continued overleaf….

….cont.

	Belmore Farm	Bog Farm	Causeway Wood Frm	Dove Top 1	Fish Farm Bottom	Hill End Farm	Llanerch Farm	Nant Valley	Pennerley House Dr	Perry Gutter	Pool House Farm	Quarry House 1	Satynpanya	Stags Head	Stanley Cottage	The Linders	The Old Farmhouse	The Stables	Villa Farm	Weo Farm
creeping bent		O							R	R									O	
creeping buttercup	R	F	O	O	A		O	R	F	O	F	O	R	R	R	R	O	O	F	R
creeping cinquefoil				R	R		R													
creeping soft-grass	R		R					O										R	O	
creeping thistle			O		O		R	R		R	R		R	O	R	R	R		F	O
crested dog's tail	O	F	A	F		A	A	R	A	O	R	A	F		R	F	A	A	O	O
cuckooflower		R	R	R	O				R	R	R			R			F		R	
curled dock					R		R			R					R		R			
cut-leaved cranesbill			R				R	O				R								
daisy									O					R						
dandelion	A	R	F		O	F	F	O	R	O	F	F	R	A	A	A	F	F	F	O
devil's-bit scabious								O												
dove's-foot crane's-bill														R		R				
dyer's greenweed								R												
early hairgrass														R						
eyebright	F	O					R	O	R	F			O					R		
fairy flax								R	O											
false oat-grass			R					F	R			R						R		
field forget-me-not								O												
field scabious								R	R											
field wood-rush	F		F	A	O		O	O	O	O	F	O	O	A	O	R	F	O	F	A
floating sweet-grass																				
fox-and-cubs								R												
foxglove								R		R										
fritillary																				
germander speedwell	O	R	R	R	F	R		O	R	R	A			O	R		O	R	O	
glaucous sedge													R							
goat's-beard						O	R	R												R
gorse sp.								R												
great mullein								R												
greater bird's-foot-trefoil		R	R	R				O	R	R	R	R	R				R	R		O
greater butterfly-orchid									R											
greater plantain											R			R	R		R			
greater stitchwort			R								R				R		R			
greater trefoil																				
green-winged orchid		R																		
ground elder					R															
ground ivy								R												
hairy sedge														R						
hairy tare		R						R				O	R					R		
heath groundsel								R												
heath speedwell								R												
heath spotted-orchid	R								O				R							
hedge bedstraw								F	R											
hedge woundwort																				
hedgerow cranesbill								R												

continued overleaf….

…cont.

	Belmore Farm	Bog Farm	Causeway Wood Fm	Dove Top 1	Fish Farm Bottom	Hill End Farm	Llanerch Farm	Nant Valley	Pennerley House Dr	Perry Gutter	Pool House Farm	Quarry House 1	Satypanya	Stags Head	Stanley Cottage	The Linders	The Old Farmhouse	The Stables	Villa Farm	Weo Farm
hemp agrimony									R											
hemp nettle		R						R												
herb Robert									R											
hogweed		R	O		F	F	R	R		O	R	R	O		R			O		
imperforate st John's-wort							R	R												
ivy-leaved speedwell					R					R										
jointed rush			R						R											
lady's bedstraw								O						R					R	
lesser burdock								R			R									
lesser celandine					R					R	R			R	R		O			
lesser stitchwort	R	R	O	O	F	O	R	F		R	R	R	R			R	R	O	O	F
lesser swine-cress																				
lesser trefoil	O	O	A			A	A	O	F	A		O	A	A	F	A	O	A	R	R
marsh bedstraw																				R
marsh foxtail																				
marsh thistle	R		R					R		R	R		R	R			R		R	R
meadow buttercup	A	F	A	A	F	F	A	F	A	A	A	A	A		O	A	A	A	O	O
meadow cranesbill																R				
meadow foxtail		O	R		F	O	O	R	O	F	R	O	R	R	R		O	O	R	
meadow saxifrage																	R			
meadow vetchling			R	R		O	R	O	O	O	R		O				O	O	R	R
meadowsweet																	R			
mouse-ear-hawkweed											R			R						
musk mallow		R						R	R							R		R		
nipplewort								O												
oval sedge					R					R			R					R		
oxeye daisy	R	O	R	O		R		A	A		R	R	O		R	O				
perennial ryegrass	R		A			A	O		F	O		O	O	O	R	O	O	A	R	R
pignut	O		O	A	O			R	O	F	O	A	R				R	O	R	A
prickly sedge								R												
prickly sow-thistle								R												
quaking-grass				R																
ragged-robin		R						R	R	R	R		R							
ragwort				R		R		R				R		R	R					R
red campion								F												
red clover	A	O	A	O	F	A	A	O	A	A	O	F	A	F	F	A	O	A	O	R
red dead-nettle																				
red fescue	A	F	O	A	A	A	A	O	A	A	A	A	F	A	F	F	A	A	A	A
ribwort plantain	A	F	F	F	R	A	A	F	A	A	A	A	A	F	A	A	F	A		O
rosebay willowherb								R												
rough hawkbit	R	R	R	R			R	O	O			R				R				
rough meadow-grass	O	A	O	O	A		O	A	O	F	F	F			R	O	O	R	A	
salad burnet								O								R				
scarlet pimpernel																				
selfheal		R	R			F	R	F	R				A				R			

continued overleaf….

….cont.

	Belmore Farm	Bog Farm	Causeway Wood Fm	Dove Top 1	Fish Farm Bottom	Hill End Farm	Llanerch Farm	Nant Valley	Pennerley House Dr	Perry Gutter	Pod House Farm	Quarry House 1	Satyrpanya	Stags Head	Stanley Cottage	The Lindens	The Old Farmhouse	The Stables	Villa Farm	Weo Farm
sharp flowered rush																	R	R		
sheep's fescue														R						
sheep's sorrel								R												
shining cranesbill																				
silverweed											R									
slender St John's-wort								R												
smaller cat's-tail																				
smooth hawksbeard	R		R			O		R						R		R	R	R	R	R
smooth meadow grass					R	R				R	O			O	O			R		
smooth sow-thistle								O												
smooth tare		R						R												
sneezewort		R						R	R											
soft brome		O	R		F	O	A		O	O				R	O	A	O	F		R
soft rush		R								R		R							R	
southern marsh-orchid											R									
spear thistle							R	R			R				R		R		R	
spring sedge														R						
square-stalked willowherb								R												
squirreltail fescue							F	R	R	R				R	F		R			
star sedge																			R	
sticky mousear											R									
sweet vernal grass	A	A	A	A	A	A	A	F	A	A	A	A	A	A	A	A	A	A	A	A
teasel								R												
thyme-leaved speedwell			R								R			R			O			
timothy							R		R							O				R
toadflax								R												
tormentil	R										R								R	
trailing st John's-wort								R												
tufted hair grass		R				R			R			R								
tufted vetch			O						O				R							
Viper's-bugloss								R												
wall speedwell							R	R			R		R	R	R					
wavy bitter-cress								R												
white clover	F	O	F	O	F	O	F	R	O	F	O	O	R	A	F	O	A	F	R	O
wild angelica								O												
wild carrot								F			R									
wood avens					R			R		R										
wood dock							R	R			R									
wood sage								R												
yarrow	O	O		O	O	O	F	A			R	O		F	O	R	F	O	R	
yellow oat-grass	R								A									R		
yellow rattle	A	A	A	O		A	A	A	R	A	O	R	A	A	A	A	R	A	R	
Yorkshire fog	F	A	A	A	A	A	A	A	A	A	F	A	F	F	A	A	A	A	A	A

5.4 Field Form

This is a basic field form which includes those species commonly encountered. Additional species should be added during the survey. An editable version can be provided.

Grassland Condition Assessment

Site Name:	
Grid / parcel reference	
Main Surveyors &date:	

Map the overall cover of scrub/ shrubs/ dense bracken etc and exclude from your sampling.
% cover scrub: *% cover undesirables:* *% bare ground:*

Please tick the boxes to indicate that a species or feature is present at a stopping point												
		Stopping Point										
		1	2	3	4	5	6	7	8	9	10	
General details	herb:grass ratio (% herb)											
	cover *Lolium* & clover %											
	Tussock / uneven											
	sward height (cm)											
	obvious flowering (y/n)											
Negative indicator species	creeping thistle											
	dock - broad-leaved											
	nettle											
	bracken											
Grasses	cock's-foot											
	common bent (short lig)											
	creeping bent (long lig)											
	creeping soft-grass											
	crested dog's tail											
	false oatgrass											
	marsh foxtail											
	meadow foxtail											
	perennial rye-grass											
	red fescue											
	rough meadow-grass											
	sheep's fescue											
	smooth meadow-grass											
	soft brome											
	sweet vernal grass											
	tufted hairgrass											
	wavy hairgrass											
	Yorkshire fog											
Positive Indicator species High quality (priority habitat)	bedstraw sp (l/h)											
	bird's-foot-trefoil sp											
	changing forget-me-not											
	common knapweed											
	heath speedwell											
	meadow vetchling											
	meadowsweet											
	orchid sp. (name)											
	oxeye daisy											
	pignut											
	tormentil											
	yellow rattle											
	other (name)											

		1	2	3	4	5	6	7	8	9	10	
Positive Indicator species Medium quality	bulbous buttercup											
	common cat's-ear											
	common sorrel											
	creeping cinquefoil											
	cuckooflower											
	field wood-rush											
	germander speedwell											
	lesser stitchwort											
	lesser trefoil											
	meadow buttercup											
	red clover											
	ribwort plantain											
	selfheal											
	yarrow											
	violet sp.											
	other (name)											
Other species	common mousear											
	creeping buttercup											
	white clover											
	other (name)											
notes	e.g. anthills, birds, management, livestock, ancient trees etc.											