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**Lowland grassland SSSI condition assessment** (version date 20/5/24; R. Whitlock, A. Hurst)

Recorder(s):

Site Name:

NVC type: **CG2 (incorporating climate change indicators)**

Unit/subdivision reference Date:

Condition: Favourable maintained/Favourable recovered /Unfavourable improving/

Unfavourable no change/Unfavourable declining/Partially destroyed/Destroyed

Recommended visiting period: May - July

Recommended frequency of visits: Site-specific decision

Key management activities affecting condition to discuss with manager:

Grazing intensity/stocking rate FYM input

Grazing period Other inputs

Supplementary feeding Stock type

Scrub and weed control

**Positive indicator species:** *Anthyllis vulneraria ( ), Asperula cynanchica ( ), Campanula glomerata ( ), Cirsium acaule ( ), Filipendula vulgaris ( ), Gentianella* spp. *( ), Helianthemum nummularium ( ), Hippocrepis comosa ( ), Leontodon hispidus/L. saxatilis ( ), Leucanthemum vulgare ( ), Linum catharticum ( ), Lotus corniculatus ( ), Pilosella officinarum (=Hieracium pilosella) ( ), Plantago media ( ), Polygala* spp. *( ), Primula veris ( ), Sanguisorba minor ( ), Scabiosa columbaria ( ), Serratula tinctoria ( ), Succisa pratensis ( ), Thymus* spp*. ( ).*

**Negative indicator species:** *Cirsium arvense ( ), Cirsium vulgare ( ), Rumex crispus ( ), Rumex obtusifolius ( ), Senecio jacobaea ( ), Urtica dioica ( ).*

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| ***Attribute (\*= mandatory attribute. One failure among***  ***mandatory attributes = unfavourable condition)*** | *Target* | ***Estimate for attribute*** |
| \*Approx proportion of unit/ subdivision covered by specified NVC type | NA |  |
| \*Extent of community (recoverable reduction = unfavourable; non-recoverable reduction = partially destroyed). | No loss without prior consent | (Describe and refer to map) |
| \*Site-level sward composition: grass/herb (ie non-Graminae) ratio (average across stops on structured walk)  ***2 x 2m quadrat level*** | **40-90%** herbs |  |
| \*Site-level sward composition: frequency of positive indicator species/taxa.  ***2 x 2m quadrat level*** | At least **four** species/taxa **frequent** and **three occasional** throughout the sward | #frequent:  #occasional: |
| \*Site-level sward composition: total cover of *Brachypodium pinnatum* and *Bromopsis erecta.*  ***Feature level*** | Neither species at more than **10%** cover | *B. pinnatum:*  *B. erecta:* |
| \*Sward composition: frequency and % cover of negative indicator species/taxa.  ***2 x 2m quadrat and feature level*** | No species/taxa **frequent** throughout the sward or singly or together more than **5%** cover | #frequent:  Total cover: | |
| \*Sward composition: frequency and % cover of all scrub and tree species, excluding *Juniperus communis*, considered together. NB If scrub/tree species are more than occasional throughout the sward but less than 5% cover, they are soon likely to become a problem if grazing levels are not sufficient or if scrub control is not being carried out. ***2 x 2m quadrat and feature level*** | No more than **5%** cover | Frequency:  Total Cover: | |

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| *Attribute (\*= mandatory attribute. One failure among* ***mandatory attributes = unfavourable condition)*** | ***Target*** | ***Estimate for attribute*** |
| Site-level sward structure: average canopy height across stops  ***2 x 2m quadrat level*** | **2-10 cm** |  |
| Sward structure: litter in a more or less continuous layer, distributed either in patches or in one larger area. ***2 x 2m*** | Total extent no more than **25%** of the sward |  |
| Sward structure: extent of bare ground (not rock) distributed through the sward, visible without disturbing vegetation. ***2 x 2m*** | No more than **10%** |  |
| Sward structure: rabbit grazing and disturbance levels, localized bare ground around rabbit warrens. ***Feature level*** | No more than **0.05** ha ie approximately 20x20 metres |  |

**Structured walk recording form**

*Frequencies: totals out of 20 stops (final column). 1-4 = rare, 5-8 = occasional, 9+ = frequent or more*

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| **Station/stop:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **Avg** |
| ***1. Condition attributes*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil depth to bedrock |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Canopy height |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| % Forbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leaf litter, % |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bare ground, % |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabbit disturbance,% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| ***2. Indicator species presence/absence*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Tot.** |
| *Anemone nemorosa* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Lathyrus linifolius* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Primula veris* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Scrub/ trees* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| ***3. Indicator species frequencies*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Sanguisorba minor* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Thymus polytrichus* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Pilosella officinarum* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Succisa pratensis* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Potentilla erecta* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Viola riviniana* **(F)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Structured walk recording form: Additional species**

*Frequencies: totals out of 20 stops (final column). 1-4 = rare, 5-8 = occasional, 9+ = frequent or more*

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|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **Total** |
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**Methods**

*Before or after visiting unit/ subdivision (within one month of survey date)*

1. Discuss and record management activities affecting condition with site manager, with reference to map (grazing/ stocking information, livestock feeding information, weed/ scrub control etc)

*On visiting site*

1. Verify presence of specified NVC type. *Constant* species of **CG2** are (defining species in bold):   
   ***Helictotrichon pratense*** / ***Helictochloa (Avenula) pratensis***, *Briza media*, *Carex flacca*, ***Festuca ovina***, *Hieracium pilosella*, *Koeleria macrantha*, *Leontodon hispidus*, *Linum catharticum*, *Lotus corniculatus*, *Plantago lanceolata*, *Sanguisorba minor*, *Scabiosa columbaria*, *Thymus praecox* / *Thymus polytrichus.*
2. Establish extend and limits of specified NVC vegetation type within the survey unit/ subdivision, and record proportion of cover of the vegetation within the survey unit/ subdivision.
3. Assess and record change in extent with reference to map.
4. Establish a series of 10 (min #) to 20 (ideal #) stations covering the full extent of the target vegetation type in an approximate “W” shape or zig zag.

*At each station:*

1. Establish a 2 x 2 M quadrat (can be paced out).
2. Record condition attributes in the structured walk recording form (“***1. Condition attributes***”).
   1. Soil depth can be measured using a soil depth probe (1 cm diameter aluminium rod with handles for driving and extracting the probe). Make and record two measurements per quadrat.
   2. Canopy height should be measured physically using a steel rule where length graduations start at the end of the ruler. Make and record two measurements per quadrat.
   3. Other attributes here are assessed visually for the whole 2 x 2 m quadrat.
3. Record indicator species presence/ absence in the structured walk recording form (“***2. Indicator species presence/absence***”).
   1. Note presence absence of positive and negative indicator species within the quadrat, including all scrub and tree species (in any age category, but excluding *Juniperus communis*) as an additional collective category.
   2. Ensure that observations are completed for three additional species indicative of cooler wet grassland variants (*Anemone nemorosa*, *Lathyrus linifolius*, *Primula veris*) and pre-populated in recording form.
4. Record 3. Climate indicator species frequencies in the structured walk recording form (“***3. Indicator species frequencies***”).
   1. Place 0.5 m x 0.5 m quadrat with 10 cm divisions (25 cells) at the centre of the main 2 x 2 m quadrat.
   2. For sixnamed indicator species record frequency out of 25 within the smaller quadrat, as a count of the number of occupied cells.

After completing survey at the stations:

1. Use the structured walk recording form to complete site-level attributes (herb ratio, summary of frequencies of positive and negative indicator species and scrub and trees, canopy height, bare ground, rabbit disturbance, litter).
   1. Where average values need to be calculated this can be done on return from site.
   2. Site-level attributes for bare ground, rabbit disturbance, and litter should consider the extent of the specified vegetation type as a whole, and not be limited only to the stations and their quadrats.
2. Ensure that site level estimates are made for:
   1. total cover of *Brachypodium pinnatum* and *Bromopsis erecta.*
   2. total cover of scrub or tree species (excluding *J. communis*).
   3. total collective cover of negative indicator species.
3. Check recording form for completeness before leaving site.