POLICY NOTE ON GRASSLAND CREATION FOR WILDLIFE IN HEREFORDSHIRE

1. **OLD IS BEST.** The successful conservation of old, species-rich grasslands through appropriate management is the best way to conserve our grassland heritage in Herefordshire. There are still grasslands of this type in the county which remain vulnerable, and securing their future will always deliver the greatest wildlife gain.

2. **NEW IS GOOD.** Flower-rich grasslands created from scratch or by the enhancement of swards of modest interest by skilled intervention can however contribute greatly to restoring biodiversity and may be the only option in the most nature-depleted areas.

3. **DO YOUR HOMEWORK.** Expertise in creating and restoring meadows and pasture now grows year on year. There is a lot of advice on the HM website and following this as closely as possible in preparation, practise and aftercare will ensure your project has the best possible chances of success.

4. **HEREFORDSHIRE HAS <u>DISTINCTIVE</u> GRASSLAND HERITAGE**. Though our grassland flora is less-rich overall than celebrated and well-publicised examples on, say, the chalk soils of the south-east or the upland hay meadows of the north and west, we retain significant and distinct grassland interest. We are typified by weakly acid pasture and meadow on the generally heavy soils of the Old Red Sandstone which cover 80% of the county. No other county has such a large resource of such grassland and it sits within an actively and heavily farmed landscape; its relative uniformity stitches the various character areas together giving our county an ecological cohesiveness absent in many others. Where limestones occur, they are usually leached or drift-covered, and support rather similar weakly acid swards. The differing porosity of the layers within the Old Red Sandstone means zones of wetter and drier ground dot the basic canvas. Patches of rush pasture are thus distinctive, and our parched grasslands are probably more significant than is realised nationally. Though mostly now lost, flood meadows beside our rivers inject important grassland variation up and down the county.

5. **THE MIS-MATCH.** Most suppliers of wildflower seed for grassland restoration are based outside of Herefordshire, and source their material from and offer advice based on different grassland ecosystems to ours. This is changing, but slowly.

6. **DIVERSE OR SEMI-NATURAL?** Diverse grasslands are now being created for a range of reasons, not all primarily motivated by nature conservation. Motive, management context and scale will affect ability and willingness to recreate semi-natural grasslands ‘exactly as they were’. However, dependent native grassland biodiversity (such as insects), ecosystem resilience and local character are likely to be best served by creating grasslands which mimic those which until recently widely characterised our landscape. We should also bear in mind that competition between different grassland species is subtle and plays out over many years so that, to a certain extent, land and climate will determine which species succeed and which fail, rather than what goes into the ground in year 1.

7. **LOCAL IS BEST.** For these and other reasons local seed is always preferred. There is at present a supply problem however, at a time when grassland creation is set to increase through BNG, and so it is likely that wildflower seed will continue to be purchased from commercial suppliers.

8. **RIGHT PLANTS FOR RIGHT PLACE.** For this reason, guidance in the form of lists is given below on which species are suitable for introduction into the Herefordshire grassland landscape where biodiversity is the main driver. The lists are derived from NVC constancy tables, modified in the light of local research into old residual grasslands within the county. Two main lists are given (Old Reds Sandstone and limestone), and they are rather similar, reflecting the relative uniformity of grasslands in our county. Presence on the list does not imply availability, but that the taxon is suitable for Herefordshire.

9. **WHAT TO AVOID.** Some plants commonly offered within seed-mixes are particularly unsuitable for Herefordshire and should be avoided if possible for biodiversity-driven schemes. These include those not native to or characteristic of the county, and those at the edge of their British range with us, where new sowings potentially obscure this important aspect of the species' ecology. These are given in list 4.

10. **LOCALLY NATIVE SPECIES MISSING FROM THE LISTS.** Many other species occur in semi-natural grasslands that are not on the lists. Some have seedbanks or other powerful means of arriving of their own accord (eg dandelion, orchids). Others include those less common species, some of which have regional patterns within the county. Our rarest species may be so for natural reasons related to their particular ecological requirements, or because their adaptations fell especially foul of intensive land management practises. It is better to let such species colonise of their own accord or to be the subject of secondary introduction programmes than include them at the onset. Such species include Great Burnet *Sanguisorba officinalis*, Meadow-rue *Thalictrum flavum*, Wild Daffodil *Narcissus pseudonarcissus*, Fritillary *Fritillaria meleagris,* Dyer's Greenweed *Genista tinctoria*, Saw-wort *Serratula tinctoria* and Wood Anemone *Anemone sylvestris*.

    Our actions should be construed as creating a stronger, richer canvas for our surviving wild flora to exploit, and which reflects established local character, rather than trying to restore everything from the outset.

    SH
    21.1.24

LIST 1. GRASSLANDS ON THE OLD RED SANDSTONE

Grasses

Agrostis capillaris	Common Bent	
Anthoxanthum odoratum	Sweet Vernal-grass	
Briza media	Quaking grass	
Cynosurus cristatus	Crested Dog's-tail	
Dactylis glomerata	Cock's-foot	
Danthonia decumbens	Heath Grass	
Festuca rubra	Red Fescue	
Holcus lanatus	Yorkshire Fog	
Lolium perenne	Perennial Ryegrass	*wild type preferable*
Phleum pratensis	Timothy	*wild type preferable*
Poa pratensis	Smooth Meadow-grass	
Poa trivialis	Rough Meadow-grass	
Trisetum flavescens	Yellow Oat-grass	

Broad-leaved herbs

Achillea millefolium	Yarrow	
Betonica officinalis	Betony	
Cardamine pratensis	Lady's Smock, Cuckooflower	
Centaurea nigra	Black Knapweed	
Centaurium erythraea	Common Centaury	
Conopodium majus	Pignut	
Galium verum	Lady's Bedstraw	
Geranium pratense	Meadow Cranesbill	
Hypochaeris radicata	Common Cat's-ear	
Lathyrus linifolius	Bitter Vetch	
Lathyrus pratensis	Meadow Vetchling	
Leontodon hispidus	Rough Hawkbit	
Lotus corniculatus	Bird's-foot Trefoil	*wild type only*
Lotus pedunculatus	Greater Bird's-foot Trefoil	
Luzula campestris	Field Woodrush	
Pimpinella saxifraga	Burnet Saxifrage	
Plantago lanceolata	Ribwort	
Potentilla erecta	Tormentil	
Prunella vulgaris	Self-heal	
Ranunculus acris	Meadow Buttercup	
Ranunculus bulbosus	Bulbous Buttercup	
Rhinanthus minor	Yellow Rattle	
Rumex acetosa	Common Sorrel	
Scorzoneroides autumnalis	Autumn Hawkbit	
Succisa pratensis	Devil's-bit Scabious	
Trifolium pratense	Red Clover	*wild type only*
Trifolium repens	White Clover	*wild type only*
Veronica chamaedrys	Germander Speedwell	

LIST 2. GRASSLANDS ON LIMESTONE

(Site to be double-checked for suitability by competent ecologist. In practise most will be in the South Herefordshire (inc Woolhope Dome), Lower Wye or Malvern Hills NCAs).

Grasses

Agrostis capillaris	Common Bent	
Anthoxanthum odoratum	Sweet Vernal-grass	
Briza media	Quaking grass	
Cynosurus cristatus	Crested Dog's-tail	
Dactylis glomerata	Cock's-foot	
Festuca ovina	Sheep's Fescue	
Festuca rubra	Red Fescue	
Holcus lanatus	Yorkshire Fog	
Lolium perenne	Perennial Ryegrass	*wild type preferable*
Phleum bertolonii	Small Timothy	
Poa pratensis	Smooth Meadow-grass	
Poa trivialis	Rough Meadow-grass	
Trisetum flavescens	Yellow Oat-grass	

Broad-leaved herbs

Achillea millefolium	Yarrow	
Agrimonia eupatoria	Agrimony	
Carex flacca	Glaucous Sedge	
Centaurea nigra	Black Knapweed	
Centaurea scabiosa	Greater Knapweed	
Centaurium erythraea	Common Centaury	
Galium verum	Lady's Bedstraw	
Hypochaeris radicata	*Common Cat's-ear?*	
Lathyrus pratensis	Meadow Vetchling	
Leontodon hispidus	Rough Hawkbit	
Leucanthemum vulgare	Ox-eye Daisy	
Lotus corniculatus	Bird's-foot Trefoil	*wild type only*
Luzula campestris	Field Woodrush	
Medicago lupulina	Black Medick	
Ononis repens	*Restharrow?*	
Pilosella officinarum	Mouse-ear Hawkweed	
Pimpinella saxifraga	Burnet Saxifrage	
Plantago lanceolata	Ribwort	
Primula veris	Cowslip	
Prunella vulgaris	Self-heal	
Ranunculus acris	Meadow Buttercup	
Ranunculus bulbosus	Bulbous Buttercup	
Rhinanthus minor	Yellow Rattle	
Rumex acetosa	Common Sorrel	
Scorzoneroides autumnalis	Autumn Hawkbit	
Succisa pratensis	Devil's-bit Scabious	
Trifolium pratense	Red Clover	*wild type only*
Trifolium repens	White Clover	*wild type only*
Veronica chamaedrys	Germander Speedwell	

LIST 3. ADDITIONAL SPECIES SUITABLE FOR POORLY-DRAINED PLACES

Grasses
Alopecurus pratensis
Hordeum secalinum
Schedonorus pratensis

Broad-leaved herbs
Caltha palustris
Cardamine pratensis
Filipendula vulgaris
Lathyrus pratensis
Silaum silaus
Silene flos-cuculi
Vicia cracca

(This is in the process of being developed into a floodplain list – contact info@herefordshiremeadows.org.uk for further information)

LIST 4. SPECIES TO AVOID IF POSSIBLE

Cirsium acaule (Stemless Thistle)
(to protect the integrity of an uncommon local wildflower)

Daucus carota (Wild Carrot)
(status in Herefordshire needs more research)

Echium vulgare (Viper's Bugloss)
(probably not native to Herefordshire)

Euphrasia spp (Eyebrights)
(to protect the integrity of an uncommon local wildflower)

Festuca rubra ssp megastachys Strong Creeping Red Fescue

Galium album (Hedge Bedstraw)
(status in Herefordshire needs more research)

Helictotrichon pubescens (Hairy Oat-grass)
(to protect the integrity of an uncommon local grass)

Lathyrus nissolia (Grass Vetchling)
(probably not native to Herefordshire)

Linum bienne (Pale Flax)
(to protect the integrity of an uncommon local wildflower)

Malva moschata (Musk Mallow)
(to protect the integrity of an uncommon local wildflower)

Onobrychis viciifolia (Sainfoin)
(probably not native to Herefordshire)

Poterium sanguisorba (Salad Burnet)
(to protect the integrity of an uncommon local wildflower)

Vicia sativa (Common Vetch)
(most plants on offer will be the non-native taxon *V. sativa* ssp *segetalis*)

Viola hirta (Hairy Violet)
(to protect the integrity of an uncommon local wildflower)