

Two Acid Grasslands of North-West Herefordshire: Reference and Supplementary Information

By Stuart Hedley

The reference information provided here supplements the paper published on pp. 61-77 of Volume 71 (2023) of the *Transactions of the Woolhope Naturalists' Field Club*.

The information comprises data tables as follows:

- **TABLE 2** (p.2 below).
Data by Species for Areas of Acid Grassland Sampled at Brampton Bryan Park
- **TABLE 3** (p.6 below)
Data by Species for Areas of Acid Grassland Sampled at Bradnor Hill
- **TABLE 4** (p.9. below)
Combined Data for Areas of Acid Grassland Sampled at Brampton Bryan and Bradnor Hill, 2023

All tables show Domin and frequency values for every species found in each quadrat that was sampled. Data recorded for constant species are highlighted in grey.

Tables 2 and 3 appeared in the printed volume but are included here so that the data set is complete. They now include additional, detailed notes.

Table 4 was much too large to publish in print. However, by combining all the data from both locations it creates a 'mini sample' of grasslands in North-west Herefordshire, a record which offers a wider summary of species present today and a base from which change can be monitored in the future.

NOTE: USING THE TABLES

In Tables 2 and 3, data recorded for constant species are highlighted in grey. Totals recorded for forbs, bryophytes, and all species in each quadrat are given, with details of quadrat locations and recording dates. In all tables, quadrat numbers are taken straight from the field notebook, which reflects the original order in which they were recorded on a given survey day; thus, there may be two or more quadrats of the same number at different sites, or on the same site, if that site was visited on more than one occasion.

TABLE 2. Data by Species for Areas of Acid Grassland Sampled at Brampton Bryan Park

Table 2		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		6	5	3	4	6	F	2	1	2	5	7	F
<i>Agrostis capillaris</i>	Common Bent	6	8	7	7	8	V	7	4	4	5	6	V
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	6	7	2	3	4	V	5	4	2	4	6	V
<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss	5	6	5	4	4	V	3	5	5	5	4	V
<i>Pseudoscleropodium purum</i>	Neat Feather-moss	4	5	8	8	4	V			2	2	3	III
<i>Veronica chamaedrys</i>	Germander Speedwell	4	4	3	3		IV						
<i>Holcus mollis</i>	Creeping Soft-grass	+	2	4	3	2	IV				+	1	I
<i>Viola riviniana</i>	Common Dog-violet	4		1	4	2	IV					2	I
<i>Galium saxatile</i>	Heath Bedstraw	1		1	4	4	IV					3	I
<i>Carex muricata ssp pairei</i>	Prickly Sedge	3		4	2	+	III				2		I
<i>Holcus lanatus</i>	Yorkshire Fog	2		2	4		III						
<i>Luzula campestris</i>	Good-Friday Grass			3	2	4	III		3		3	4	III
<i>Hyacinthoides non-scripta</i>	Bluebell	3	3				II						
<i>Poa pratensis</i> ss	Smooth Meadow-grass	2	3				II	3	+		2		II
<i>Quercus</i>	Oak (sdg)	1	1				II						
<i>Campanula rotundifolia</i>	Harebell	3		1			II				3		I
<i>Potentilla sterilis</i>	Barren Strawberry	3			2		II						
plant litter		4				4	II						
bare soil		2				4	II	3				4	II
<i>Myosotis discolor</i>	Changing Forget-me-not			3	2		II				3		I
<i>Taraxacum officinale</i>	Dandelion			2	1		II						

Table 2, continued...		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		6	5	3	4	6	F	2	1	2	5	7	F
<i>Vicia sativa</i> ssp <i>nigra</i>	Narrow-leaved Vetch			3	2		II						
<i>Acer pseudoplatanus</i>	Sycamore (sdg)			1		3	II					2	I
<i>Veronica officinalis</i>	Heath Speedwell				3	2	II					3	I
<i>Rumex acetosella</i>	Sheep's Sorrel				3	2	II	6	4	5	4	4	V
<i>Aira praecox</i>	Early Hair-grass							2	3	4	3	4	V
<i>Ceratodon purpureus</i>	Redshank			1			I	3	1	2	2	3	V
<i>Polytrichum juniperinum</i>	Juniper Haircap							4	4	4	4	+	IV
<i>Veronica arvensis</i>	Wall Speedwell			2			I	2	4	4	3		IV
<i>Vulpia bromoides</i>	Squirrel-tail Fescue			2			I	3	8	7	5		IV
bare rock								4	3	3			III
<i>Hypnum cupressiforme</i>	Cypress-leaved Plait-moss							4	3	3			III
<i>Bromus hordeaceus</i>	Soft Brome							4	4	4			III
<i>Festuca ovina</i>	Sheep's Fescue							2	1	+	4		III
<i>Phleum bertolonii</i>	Small Timothy							3	2		3		III
<i>Ornithopus perpusillus</i>	Bird's-foot								4	5	3		III
<i>Hypnum lacunosum</i>	Great Plait-moss								2	2	3		III
<i>Achillea millefolium</i>	Yarrow							2	4	+			II
<i>Brachythecium albicans</i>	Whitish Feather-moss							+	4		4		II
<i>Grimmia trichophylla</i>	Hair-pointed Grimmia								3	4			II
<i>Hedwigia stellata</i>	Starry Hoar-moss								1	1			II
<i>Stellaria graminea</i>	Lesser Stitchwort	2			+		I				2	1	II
<i>Carex pilulifera</i>	Pill Sedge					3	I				1	4	II
<i>Festuca rubra</i> ssp <i>rubra</i>	Red Fescue	7					I	4				+	I
<i>Stellaria holostea</i>	Greater Stitchwort	3					I						
<i>Ranunculus bulbosus</i>	Bulbous Buttercup	2					I						
<i>Ranunculus repens</i>	Creeping Buttercup	2					I						

Table 2		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		6	5	3	4	6	F	2	1	2	5	7	F
<i>Dactylis glomerata</i>	Cock's-foot	+	3				I	+					
<i>Conopodium majus</i>	Pignut	+	4				I						
<i>Fraxinus excelsior</i>	Ash (sdg)		1				I						
<i>Cerastium fontanum</i>	Common Mouse-ear			2			I				2		I
<i>Pteridium aquilinum</i>	Bracken	+		1			I		+				
<i>Agrostis canina</i>	Velvet Bent				4		I						
<i>Potentilla anglica</i>	Trailing Tormantil				3		I						
<i>Cirsium vulgare</i>	Spear Thistle				1		I						
<i>Poa trivialis</i>	Rough Meadow-grass				1		I						
<i>Potentilla erecta</i>	Tormantil					5	I					5	I
<i>Teucrium scorodina</i>	Wood Sage					4	I				2		I
<i>Hypericum pulchrum</i>	Slender St John's-wort					3	I						
<i>Calluna vulgaris</i>	Heather					2	I						
<i>Dicranum scoparium</i>	Broom Fork-moss					1	I						
<i>Lolium perenne</i>	Perennial Rye-grass							4					I
<i>Cerastium glomeratum</i>	Sticky Mouse-ear								2				I
<i>Trifolium dubium</i>	Lesser Trefoil								2				I
<i>Cladonia pyxidata</i>	a lichen								2				I
<i>Cladonia subcervicornis</i>	a lichen								2		+		I
<i>Hypogymnia physodes</i>	a lichen								1				I
<i>Bryum capillare</i>	Capillary Thread-moss								+	2			I
<i>Aphanes australis</i>	Slender Parsley-piert										2		I
<i>Hylocomium splendens</i>	Glittering Wood-moss											4	I
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	+											
<i>Urtica dioica</i>	Stinging Nettle	+											
<i>Rumex acetosa</i>	Common Sorrel		+										

Table 2		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		6	5	3	4	6	F	2	1	2	5	7	F
<i>Ranunculus acris</i>	Meadow Buttercup												
<i>Arrhenatherum elatius</i>	False Oat-grass			+									
<i>Cirsium arvense</i>	Creeping Thistle			+									
<i>Hypericum humifusum</i>	Trailing St.John's-wort				+								
<i>Cladonia fimbriata</i>	a lichen							+					
<i>Pogonatum aloides</i>	Dwarf Haircap							+					
<i>Spergularia rubra</i>	Sand Spurrey										+		
Total forb		5	4	4	5	6		6	5	6	5	5	
Total bryophyte		5	6	9	9	5		4	7	8	6	5	
TOTAL NUMBER OF SPECIES		19	12	21	21	19		17	25	17	25	17	
OS reference (SO)		36023 71326	36403 71466	35745 71957	35773 71974	35810 71491		3661571897	36649 71849	36678 71851	35661 71908	35934 71571	
Slope, degrees		15	5	10	10	15		20	10	10	10	15	
Aspect		NNW	NNW	SSE	SSE	SSE		WNW	SE	S	ESE	SSE	
Date of recording		08.08.22	08.08.22	27.06.23	27.06.23	27.06.23		08.08.22	27.06.23	27.06.23	27.06.23	27.06.23	

TABLE 3. Data by Species for Areas of Acid Grassland Sampled at Bradnor Hill

Table 3		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		4	5	6	1	2	F	1	2	3	7	8	F
<i>Festuca ovina</i>	Sheep's Fescue	6	6	5	6	8	V	2	4	7	5	4	V
<i>Agrostis capillaris</i>	Common Bent	4	4	4	5	4	V	5	9	4	4	5	V
<i>Rhytiadelphus squarrosus</i>	Springy Turf-moss	2	4	2	4	5	V	2	3	3	2		IV
<i>Hylocomium splendens</i>	Glittering Wood-moss	5	5	3	5	5	V						
<i>Galium saxatile</i>	Heath Bedstraw	3	4	2	5	5	V		+	2			I
<i>Luzula campestris</i>	Good-Friday Grass	2	3	4	5	4	V	+	4				I
<i>Pseudoscleropodium purum</i>	Neat Feather-moss	5	6	5	4		IV		+	2	2		II
<i>Potentilla erecta</i>	Tormentil	4	3	4	4		IV						
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	1	4	3	4		IV						
<i>Pleurozium schreberi</i>	Red-stemmed Feather-moss	4	4	4		4	IV			2			I
<i>Rumex acetosella</i>	Sheep's Sorrel				+	+		5	5	5	5	2	V
<i>Aira praecox</i>	Early Hair-grass			4	1		II	4	3	4	5	4	V
<i>Polytrichum juniperinum</i>	Juniper Haircap			2			I	4	1	3	5	2	V
<i>Ceratodon purpureus</i>	Redshank			1			I	3	2	4	2	2	V
<i>Aphanes australis</i>	Slender Parsley-piert							3	2	1	3	5	V
bare soil				4			I	2	1	5	4		IV
<i>Pteridium aquilinum</i>	Bracken	6	6	2			III	2	2		2	2	IV
<i>Veronica arvensis</i>	Wall Speedwell							1	3		3	3	IV
<i>Hypnum cupressiforme</i>	Cypress-leaved Plait-moss							4	2		5	4	IV
<i>Moenchia erecta</i>	Upright Chickweed							4	3	+	2	4	IV
<i>Veronica officinalis</i>	Heath Speedwell	1	3		2		III						
<i>Dicranum scoparium</i>	Broom Fork-moss	2		3		2	III	2		4	1		III
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed		2	4	2		III	2			4		II
<i>Avenella flexuosa</i>	Wavy Hair-grass	4	4		+		II						
<i>Vaccinium myrtillus</i>	Bilberry	3	2				II						

Table 3, continued...		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		4	5	6	1	2	F	1	2	3	7	8	F
<i>Festuca rubra</i> ssp <i>rubra</i>	Red Fescue				5	4	II	2					I
<i>Cerastium glomeratum</i>	Sticky Mouse-ear							2	2			3	III
<i>Poa annua</i>	Annual Meadow-grass							1	1			3	III
<i>Cladonia furcata</i>	a lichen							3		4	3		III
bare rock										2	3	4	III
<i>Polytrichum piliferum</i>	Bristly Haircap							4			2		II
<i>Erophila verna</i> sl	Common Whitlowgrass							2			2		II
<i>Ornithopus perpusillus</i>	Bird's-foot							1				5	II
<i>Digitalis purpurea</i>	Foxglove		+					2		+		2	II
<i>Montia fontana chondrosperma</i>	Blinks								3	2			II
<i>Cladonia rangiformis</i>	a lichen									3	2		II
<i>Peltigera hymenina</i>	a dog-lichen					1	I			1	+	1	II
<i>Polychastrum formosum</i>	Bank Haircap	3					I						
<i>Carex caryophylla</i>	Spring Sedge		+	2			I				+		
<i>Thymus polytrichus</i>	Wild Thyme			4			I				4	+	I
<i>Hypnum lacunosum</i>	Great Plait-moss			3			I						
<i>Campanula rotundifolia</i>	Harebell			2			I						
<i>Phleum bertolonii</i>	Small Timothy				3		I						
<i>Trifolium repens</i>	White Clover				2		I						
<i>Holcus mollis</i>	Creeping Soft-grass					2	I						
<i>Holcus lanatus</i>	Yorkshire Fog	+						4					I
<i>Cladonia portentosa</i>	a lichen			+				2					I
<i>Achillea millefolium</i>	Yarrow							2					I
<i>Brachythecium albicans</i>	Whitish Feather-moss								4				I
<i>Poa Pratensis</i> ss	Smooth Meadow-grass					+			3				I

Table 3, continued...		U4a (bent-fescue-bedstraw)						U1b (bent-fescue-sorrel)					
		Domin Values and Frequency Values (F) by Quadrat						Domin Values and Frequency Values (F) by Quadrat					
Quadrat No.		4	5	6	1	2	F	1	2	3	7	8	F
<i>Cladonia arbuscula</i>	a lichen									2			I
<i>Ptilidium ciliare</i>	Ciliated Fringewort									2			I
<i>Collema</i> sp	a jelly lichen										4		I
<i>Pleuridium acuminatum</i>	Taper-leaved Earth-moss										1		I
<i>Cerastium fontanum</i>	Common Mouse-ear											1	I
<i>Cirsium vulgare</i>	Spear Thistle											1	I
<i>Cardamine hirsuta</i>	Hairy Bittercress											3	I
<i>Syntrichia ruralis</i> ssp <i>ruralis</i>	Great Hairy Screw-moss											5	I
<i>Senecio sylvaticus</i>	Wood Groundsel											1	I
<i>Sonchus asper</i>	Prickly Sowthistle											1	
<i>Hyacinthoides non-scripta</i>	Bluebell	+											
<i>Rhytidadelphus triquetrus</i>	Big Shaggy-moss		+										
<i>Carex pilulifera</i>	Pill Sedge				+								
<i>Cladonia chlorophaea</i>	a lichen							+		+			
<i>Ulex gallii</i>	Western Gorse								+				
<i>Pohlia nutans</i>	Nodding Thread-moss									+			
<i>Trifolium dubium</i>	Lesser Trefoil											+	
Total forb		7	7	8	6	5		7	10	7	8	7	
Total bryophyte		8	8	6	6	6		8	4	6	7	5	
TOTAL NUMBER OF SPECIES		16	15	20	15	11		25	19	18	22	22	
OS reference (SO)		27875 58274	27905 58337	27906 58425	28792 57985	28579 57991		28964 57819	28886 57803	28632 57870	27926 58427	28890 57903	
Slope, degrees		30	30	30	10	25		25	5	35	35	15	
Aspect		WNW	WNW	WSW	NE	ENE		S	S	ESE	SW	SW	
Date of recording		30.04.23	30.04.23	30.04.23	04.07.23	04.07.23		30.04.23	30.04.23	30.04.23	30.04.23	30.04.23	

TABLE 4. Combined Data for Areas of Acid Grassland Sampled at Brampton Bryan and Bradnor Hill, 2023

Table 4	U4a bent-fescue-bedstraw											U1b bent-fescue-sorrel										
	Domin Values and Frequency Values (F) by Quadrat											Domin Values and Frequency Values (F) by Quadrat										
Quadrat No.	4	5	6	1	2	6	5	3	4	6	F	1	2	3	7	8	2	1	2	5	7	F
Common Bent <i>Agrostis capillaris</i>	4	4	4	5	4	6	8	7	7	8	V	5	9	4	4	5	7	4	4	5	6	V
<i>Rhytidiadelphus squarrosus</i> (a moss)	2	4	2	4	5	5	6	5	4	4	V	2	3	3	2		3	5	5	5	4	V
Sweet Vernal-grass <i>Anthoxanthum odoratum</i>	1	4	3	4		6	7	2	3	4	V						5	4	2	4	6	III
Heath Bedstraw <i>Galium saxatile</i>	3	4	2	5	5	1		1	4	4	V		+	2							3	I
<i>Pseudoscleropodium purum</i> (a moss)	5	6	5	4		4	5	8	8	4	V		+	2	2				2	2	3	III
Field Woodrush <i>Luzula campestris</i>	2	3	4	5	4			3	2	4	IV	+	4					3		3	4	II
Sheep's Sorrel <i>Rumex acetosella</i>				+	+				3	2	I	5	5	5	5	2	6	4	5	4	4	V
Early Hair-grass <i>Aira praecox</i>			4	1							I	4	3	4	5	4	2	3	4	3	4	V
<i>Polytrichum juniperinum</i> (a moss)			2								I	4	1	3	5	2	4	4	4	4	+	V
<i>Ceratodon purpureus</i> (a moss)			1					1			I	3	2	4	2	2	3	1	2	2	3	V
Sheep's Fescue <i>Festuca ovina</i>	6	6	5	6	8						III	2	4	7	5	4	2	1	+	4		IV
Wall Speedwell <i>Veronica arvensis</i>								2			I	1	3		3	3	2	4	4	3		IV
<i>Hypnum cupressiforme</i> ss (a moss)												4	2		5	4	4	3	3			IV
<i>Hylocomium splendens</i> (a moss)	5	5	3	5	5						III										4	I
Tormentil <i>Potentilla erecta</i>	4	3	4	4						5	III										5	I
Heath Speedwell <i>Veronica officinalis</i>	1	3		2					3	2	III										3	I
Creeping Soft-grass <i>Holcus mollis</i>					2	+	2	4	3	2	III									+	1	I
<i>Pleurozium schreberi</i> (a moss)	4	4	4		4						II			2								I
Bracken <i>Pteridium aquilinum</i>	6	6	2			+		1			II	2	2		2	2		+				II
<i>Dicranum solarium</i> (a moss)	2		3		2					1	II	2		4	1							II

Table 4	U4a bent-fescue-bedstraw											U1b bent-fescue-sorrel										
	Domin Values and Frequency Values (F) by Quadrat											Domin Values and Frequency Values (F) by Quadrat										
Quadrat No.	4	5	6	1	2	6	5	3	4	6	F	1	2	3	7	8	2	1	2	5	7	F
Germander Speedwell <i>Veronica chamaedrys</i>						4	4	3	3		II											
Common Dog-violet <i>Viola riviniana</i>						4		1	4	2	II										2	I
Mouse-ear Hawkweed <i>Pilosella officinarum</i>		2	4	2							II	2			4							I
Harebell <i>Campanula rotundifolia</i>			2			3		1			II									3		I
bare soil			4			2				4	II	2	1	5	4		3				4	III
Red Fescue <i>Festuca rubra</i> ssp <i>rubra</i>				5	4	7					II	2					4				+	I
Yorkshire Fog <i>Holcus lanatus</i>	+					2		2	4		II	4										I
Prickly Sedge <i>Carex muricata</i> ssp <i>pairei</i>						3		4	2	+	II									2		I
Wavy Hair-grass <i>Avenella flexuosa</i>	4	4		+							I											
Bilberry <i>Vaccinium myrtillus</i>	3	2									I											
Bluebell <i>Hyacinthoides non-scripta</i>	+					3	3				I											
Smooth Meadow-grass <i>Poa pratensis</i> ss					+	2	3				I		3				3	+		2		II
Oak <i>Quercus</i> (sdg)						1	1				I											
plant litter						4				4	I											
Barren Strawberry <i>Potentilla sterilis</i>						3			2		I											
Changing Forget-me-not <i>Myosotis discolor</i> ssp <i>discolor</i>								3	2		I									3		I
Dandelion <i>Taraxacum officinale</i>								2	1		I											
Narrow-leaved Vetch <i>Vicia sativa</i> ssp <i>nigra</i>								3	2		I											
Sycamore <i>Acer pseudoplatanus</i> (sdg)								1		3	I										2	I
Slender Parsley-piert <i>Aphanes australis</i>												3	2	1	3	5				2		III

Table 4	U4a bent-fescue-bedstraw											U1b bent-fescue-sorrel										
	Domin Values and Frequency Values (F) by Quadrat											Domin Values and Frequency Values (F) by Quadrat										
Quadrat No.	4	5	6	1	2	6	5	3	4	6	F	1	2	3	7	8	2	1	2	5	7	F
bare rock														2	3	4	4	3	3			III
Bird's-foot <i>Ornithopus perpusillus</i>												1				5		4	5	3		III
Upright Chickweed <i>Moenchia erecta</i>												4	3	+	2	4						II
Sticky Mouse-ear <i>Cerastium glomeratum</i>												2	2			3		2				II
Squirrel-tail Fescue <i>Vulpia bromoides</i>								2			I						3	8	7	5		II
Annual Meadow-grass <i>Poa annua</i>												1	1			3						II
<i>Cladonia furcata</i> (a lichen)												3		4	3							II
Yarrow <i>Achillea millefolium</i>												2					2	4	+			II
<i>Brachythecium albicans</i> (a moss)													4				+	4		4		II
Soft Brome <i>Bromus hordeaceus</i>																	4	4	4			II
Small Timothy <i>Phleum bertolonii</i>				3							I						3	2		3		II
<i>Hypnum lacunosum</i> (a moss)			3								I							2	2	3		II
<i>Polytrichum piliferum</i> (a moss)												4			2							I
Spring Whitlowgrass <i>Erophila verna</i> sl												2			2							I
Foxglove <i>Digitalis purpurea</i>		+										2		+		2						I
Blinks <i>Montia fontana</i> ssp <i>chondrosperma</i>													3	2								I
<i>Cladonia rangiformis</i> (a lichen)														3	2							I
<i>Peltigera hymenina</i> (a dog-lichen)					1						I			1	+	1						I
Common Mouse-ear <i>Cerastium fontanum</i>								2			I					1				2		I
<i>Hedwigia stellata</i> (a moss)																		1	1			I
<i>Grimmia trichophylla</i> (a moss)																		3	4			I

Table 4	U4a bent-fescue-bedstraw											U1b bent-fescue-sorrel										
	Domin Values and Frequency Values (F) by Quadrat											Domin Values and Frequency Values (F) by Quadrat										
Quadrat No.	4	5	6	1	2	6	5	3	4	6	F	1	2	3	7	8	2	1	2	5	7	F
Lesser Stitchwort <i>Stellaria graminea</i>						2			+		I									2	1	I
Pill Sedge <i>Carex pilulifera</i>				+						3	I									1	4	I
Total forb	7	7	8	6	5	5	4	4	5	6		7	10	7	8	7	6	5	6	5	5	
Total bryophyte	8	8	6	6	6	5	6	9	9	5		8	4	6	7	5	4	7	8	6	5	
TOTAL NUMBER OF SPECIES	16	15	20	15	11	19	12	21	21	19		25	19	18	22	22	17	25	17	25	17	