



INTRODUCING MY VICE COUNTY

Montgomeryshire v.c.47

Recorders: Kate Thorne & Gill Foulkes

Montgomeryshire (v.c.47) has been described as 'a relatively unsung part of Wales but it is full of choice plants and quiet beauty and deserves to be better known'. 'Quiet beauty' describes this county well. Hills are widespread but tend to be less dramatic than in the counties to the north, with plateaued summits, and the landscape is dominated by pasture, with frequent woodland, hedges, trees and conifer plantations, also several wind farms. Only a few small towns are present, and arable land is largely confined to floodplains in the east.

Uplands and acid grassland

The highest hills include the Berwyns (north) and Plynlimon/Pumlumon (south-west), both of which are shared with other Welsh counties; Montgomeryshire has part of the highest Berwyn mountain, Moel Sych which is 827m high.

The flora is, overall, dominated by acid-loving species, with acid-grassland winter annuals (in U1 grassland) frequenting nutrient-poor summer-parched south/south-east facing slopes, particularly on the hills in the east, e.g. Corndon, Roundton*, the Breiddens* and the Llanfyllin hills. Such species include *Moenchia erecta* (Upright Chickweed), *Aphanes australis* (Slender Parsley-piert), *Teesdalia nudicaulis* (Shepherd's Cress), *Stellaria pallida*

Narcissus pseudonarcissus in wood pasture.
Tammy Stretton

(Lesser Chickweed) and *Ranunculus parviflorus* (Small-flowered Buttercup). Patches of this grassland may also be found around historic ruins, e.g. Montgomery Castle*. Elsewhere the acidic grassland may support *Jasione montana* (Sheep's-bit), *Viola lutea* (Mountain Pansy) and *Wahlenbergia hederacea* (Ivy-leaved Bellflower); the first British record for the last species was from Machynlleth in 1632. Heathland with mire (including blanket bog and wet heath) is invariably present on higher ground, particularly as one moves westwards, with fringes often supporting *Molinia*-dominated 'rhos pasture'. Rush pasture tends to be more ubiquitous.

County uncommon upland species include *Rubus chamaemorus* (Cloudberry), at its southern limit in Britain, and *Carex bigelowii* (Stiff Sedge), both found only on the Berwyns, *Lycopodium clavatum* (Stag's-horn Clubmoss), *Andromeda polifolia* (Bog-rosemary), *Vaccinium vitis-idaea* (Cowberry), *Diphasiastrum alpinum* (Alpine Clubmoss), *Micranthes stellaris* (Starry Saxifrage), *Neottia cordata* (Lesser Twayblade), *Festuca vivipara* (Viviparous Fescue), *Carex limosa* (Bog-sedge) and *C. magellanica* (Tall Bog-sedge) and, rarely, the eyebrights *Euphrasia micrantha*, *E. scottica* and their hybrid.



Micranthes stellaris. Gill Foulkes



Lycopodium clavatum. Gill Foulkes

Base-rich locations

The east also contains the main areas of limestone in the county. Llanymynech Hill (a once quarried site and easily accessible to the public*) is the only site or one of only a very few sites for calcicoles, e.g. *Gymnadenia densiflora* (Marsh Fragrant-orchid) and other orchid species, *Helianthemum nummularium* (Common Rock-rose), *Scabiosa columbaria* (Small Scabious), *Rosa spinosissima* (Burnet Rose), *R. micrantha* (Small-flowered Sweet-briar), *Potentilla verna* (Spring Cinquefoil), *Euphrasia nemorosa*, *Sorbus anglica* (English Whitebeam), *Avenula pubescens* (Downy Oat-grass) and *Bromopsis erecta*

Silene viscaria on south crags, Craig Breidden.
Kate Thorne



(Upright Brome). The only other significant site for calcicoles is Craig Breidden – the quarried hill at the west end of the Breidden complex. The famous west and south crags of this hill have only a few of the above calcicoles, but also support several *Hieracium* and *Sorbus* species, including *S. stirtoniana* (Stirton's Whitebeam), which is endemic to this site and has only been described post 2000. *Pilosella peleteriana* ssp. *subpeleteriana* (Shaggy Mouse-ear-hawkweed) is another endemic. Of most interest on these crags are the three rarities: *Silene viscaria* (Sticky Catchfly), *Veronica spicata* ssp. *hybrida* (Spiked Speedwell) and *Potentilla rupestris* (Rock Cinquefoil), all of which struggle against continued quarrying and scrub invasion. Associate plants include both calcicoles and calcifuges, the latter including *Erica cinerea* (Bell Heather) and *Petrosedum forsterianum* (Rock Stonecrop). Whilst access to these plants in the wild is difficult (permission is needed to enter the quarry), the remaining (more acidic) Breidden Hills have a number of footpaths that can be followed* and a list of interesting species including U1 annuals and *Potentilla argentea* (Hoary Cinquefoil).

Over the rest of the county, calcicoles are usually found in small pockets, but these are surprisingly frequent. Several river and stream valleys are associated with localised, base-rich rock outcrops. Pont Llogel* (Coed Copi'r Graig SSSI), on the Afon Vrynwy, boasts *Rosa spinosissima*, *Rubus saxatilis* (Stone Bramble), *Thalictrum minus* (Lesser Meadow-rue), *Geranium sylvaticum* (Wood Crane's-bill) and *Melica nutans* (Mountain Melick) close to the path. *R. saxatilis* has also been found on rocks along the Afon Rhiw and Gam. Other base-rich locations

are found along little gorges and streams that cut into several of the hill complexes, such as the Long Mountain and the Kerry Ridgeway in the east, with largely woodland species, e.g. *Daphne laureola* (Spurge Laurel), Trannon Moor, near Carno, with *R. saxatilis* and *Cystopteris fragilis* (Brittle Bladder-fern), Craig Dugwm, near Llandinam, with *Gymnocarpium robertianum* (Limestone Fern), and the Berywns, with *Melica nutans* and *Hieracium* species. This habitat type is typical for *Tilia cordata* (Small-leaved Lime) and there are a number of other riparian cliff locations for *Hieracium* species e.g. *H. carneddorum*, *H. lasiophyllum* and *H. placerophylloides*.

Many of the upland mires support base-rich pockets with *Carex hostiana* (Tawny Sedge), *C. dioica* (Dioecious Sedge), *C. lepidocarpa* (Long-stalked Yellow-sedge), *Linum catharticum* (Fairy Flax), *Pinguicula vulgaris* (Butterwort), *Eleocharis quinqueflora* (Few-flowered Spike-rush), *Valeriana dioica* (Marsh Valerian), *Briza media* (Quaking-grass) and *Galium uliginosum* (Fen Bedstraw). Pockets of calcareous grassland species are sometimes found close to the UI acid grassland e.g. on Roundton, and include *Carlina vulgaris* (Carline Thistle) and *Thymus drucei* (Wild Thyme).

Califuge species

The little gorges in the hills are also havens from grazing for many other species. Uncommon calcifuge species include *Drymochloa sylvatica* (Wood Fescue) and *Hymenophyllum* species, predominantly *H. wilsonii* (Wilson's Filmy-fern), which can be found in such locations in the west, as well as *Dryopteris aemula* (Hay-scented Buckler-fern). Lower down the larger rivers (Afon Vyrnwy, Banwy and Gam), in fast-flowing sections, *Trollius europaeus* (Globeflower) grows at a number of sites on small river islands, e.g. at Pont Llogel*, Dolanog and Llanfair Caereinion, but there are two sites of a different nature in the west – in mire and steep upland seepage.

Wetlands

Montgomeryshire has many rivers and lowland pools. Two great rivers – the Afon Hafren (Severn) and Gwy (Wye) – arise in the county on Plynlimon. Whilst the Wye runs briskly down towards Radnorshire, the Severn flows from west

to east across the county. Only the Severn (plus its tributaries the Vyrnwy, Banwy and the Camlad) run through floodplains and have associated oxbows. There are also other pools in the more low-lying land in the east. These lowland oxbows and pools, overall, support quite a few uncommon species e.g. *Limosella aquatica* (Mudwort), *Eleocharis acicularis* (Needle Spike-rush), *Veronica catenata* (Pink Water-speedwell), *Rorippa islandica* (Northern Yellow-cress), *R. amphibia* (Great Yellow-cress), *R. sylvestris* (Creeping Yellow-cress), *Butomus umbellatus* (Flowering-rush), *Rumex maritimus* (Golden Dock), *Scirpus sylvaticus* (Wood Club-rush) and *Hottonia palustris* (Water-violet). *Oenanthe fistulosa* (Tubular Water-dropwort) is a rare species in pools on slightly higher ground.

Many small upland pools grace several of the hill complexes, and are amongst the best of Montgomeryshire's features. Many are Local Wildlife Sites rather than SSSIs. Several support *Isoetes* species – *I. lacustris* (Quillwort), *I. echinospora* (Spring Quillwort) and their hybrid – *Sparganium angustifolium* (Floating Bur-reed), *Utricularia minor* (Lesser Bladderwort) and *Lobelia dortmanna* (Water Lobelia). Such pools include Llyn Glanmerin, near Machynlleth, Llyn Gwyddior* and Llyn Coch-hwyad to the west of the Gam valley and Llyn Hir, Llyn Newydd and Llyn y Grinwydden to the east of the Gam. Every species that has ever been found at

Lobelia dortmanna. Gill Foulkes





Glaslyn and an adjacent gorge. Gill Foulkes

Llyn Gwyddior is, amazingly, still present – there are good colonies of *Luronium natans* (Floating Water-plantain), with *Pilularia globulifera* (Pillwort), and *Persicaria minor* (Small Water-pepper), *Salix repens* (Creeping Willow) and *Euphrasia x electa* (*E. micrantha* x *E. scottica*) around the margins. The three pools to the east are less diverse in a surround of mire with frequent pockets of *Hypericum elodes* (Marsh St John's-wort).

Further to the south-west, Glaslyn, Llyn Bugeilyn and Llyn Penrhaeadr, in the Plynlimon SSSI, also support some of the above species, and nearby small pools, near Dylife, support *Utricularia minor* and *Isoetes echinospora*.

Semi-upland pools include Llyn Ebyr, near Llanidloes, which has floating bog around the edge supporting species such as *Carex lasiocarpa* (Slender Sedge). This pool also has *Pilulifera globularia*, *Isoetes lacustris*, *Lobelia dortmanna*, *Utricularia minor* and several stonewort species. Llyn Gwigia, north-west of Newtown, appears to be the only extant site in v.c.47 for *Elatine hexandra* (Six-stamened Waterwort).

In addition to the numerous small pools there are the larger reservoirs, Llyn Vyrnwy and Llyn Clywedog. The north shore of the Vyrnwy reservoir is the only extant location for *Carex acuta* (Slender Tufted-sedge) and also supports *C. elongata* (Elongated Sedge) and *Eleogiton fluitans* (Floating Club-rush).

V.c.47 extends seawards to include some saltmarsh, next to the Afon Dovey (Dyfi), near

Machynlleth. This area is difficult to visit, partly because it is private land but also because it is in close proximity to a nesting Osprey site. Species of interest here include *Eleocharis uniglumis* (Slender Spike-rush), *Ranunculus baudotii* (Brackish Water-crowfoot) and *Ruppia maritima* (Beaked Tasselweed), with other common maritime species and, away from the river margin, *Oenanthe lachenalii* (Parsley Water-dropwort) and *Juncus subnodulosus* (Blunt-flowered Rush).

Meadows and pastures

Several meadows (often associated with damp areas) survive in the county, invariably under special site status (SSSIs or LWSs). These (and some species-rich pasture) support a number of uncommon species such as *Dactylorhiza purpurella* (Northern Marsh-orchid), *Genista tinctoria* (Dyer's Greenweed), *Ophioglossum vulgatum* (Adder's-tongue), *Platanthera chlorantha* (Greater Butterfly-orchid), *Anacamptis morio* (Green-winged-orchid), *Bromus racemosus* (Smooth Brome), *Cirsium dissectum* (Meadow Thistle), *Colchicum autumnale* (Meadow Saffron) and *Euphrasia arctica*, with *Dactylorhiza praetermissa* (Southern Marsh-orchid) and *Silvaum silaus* (Pepper-saxifrage) only found in the east around Corndon. Meadow species appear to have declined in distribution post-2000 relatively more than others, with grazing problems leading to undermanagement.

Woodlands

Within the vice-county, areas of broadleaved woodland are often small, the largest area of ancient woodland being the oak woodland in Coedydd Llaur-y-Glyn SAC. Overall, the woodlands support a number of ancient woodland indicators, with rare/scarse species including *Neottia nidus-avis* (Bird's-nest Orchid), *Hordelymus europaeus* (Wood Barley), *Geum rivale* (Water Avens) and *Cardamine impatiens* (Narrow-leaved Bitter-cress), with *Osmunda regalis* (Royal Fern), rarely, in wet woodland. Locally, wood pasture (also churchyards and road verges) support *Narcissus pseudonarcissus* (Daffodil/Wild Daffodil).

Montgomery Canal and roadsides

The Montgomeryshire Canal* is a highly valued habitat with SAC status for its *Luronium natans*. Running between Llanymynech and Newtown, it is

easily accessible, with a towpath along the whole length. Highlights earlier in the year are *Cardamine amara* (Large Bitter-cress) and *Ranunculus circinatus* (Fan-leaved Water-crowfoot). *Luronium natans* is frequent, but seems to favour overshadowed sections where competition from non-native plants is less. Non-native plants to the area are a real problem, with *Elodea* species (waterweeds) and *Stratiotes aloides* (Water-soldier) often clogging up the waterway. These species appear to have adversely affected *Potamogeton* species, and rare ones such as *P. friesii* (Flat-stalked Pondweed) and *P. compressus* (Grass-wrack Pondweed) are difficult to find. The single site in the county for *Stellaria palustris* (Marsh Stitchwort) is in mire alongside the canal at Wern.

The county has some really good road verges, even along main roads. This is virtually the last habitat remaining for *Vicia orobus* (Wood Bitter-vetch) in the county; all sites for this are in the west and largely centred on the Wye Valley. Here there are minor stands along lane banks but significant stands are present along the main Aberystwyth road near Llangurig, where steep roadside banks are buffered from the actual road by a wide band of regularly mown grassland. The verges are also really important for many other species which have been grazed out elsewhere e.g. *Serratula tinctoria* (Saw-wort), *Sanguisorba officinalis* (Great Burnet), *Hieracium* species, *Lathyrus linifolius* (Bitter-vetch), *Betonica officinalis* (Betony) and *Melampyrum pratense* (Common Cow-wheat), but are, unfortunately, under threat from vehicular damage and/or nutrient enrichment. Two *Vicia orobus* sites, although within county 'Roadside Reserves', have been destroyed recently by road works and cable-laying. Hedgerows often support *Rosa mollis* agg. (Downy-rose).

Two special species

Lastly, perhaps our most interesting species, are *Cephalanthera longifolia* (Narrow-leaved Helleborine) and *Campanula patula* (Spreading Bellflower). The former is found in oak woodland in the east near Kerry; first found in the early 1970s, a second site was discovered only in 2018. The latter species is also present only in the east, but struggles to survive in a very few hedgerow and hedgebank sites near Corndon.

Sites and access

The Montgomeryshire countryside is, sadly, often not easy to access. Parking is frequently difficult for a group, and rights of way often lack any stiles or markers. Grid references and notes are provided below for the sites starred above

- Roundton Reserve/SSSI car park – SO29259462, April, UI annuals.
- Llanymynech Rock Nature Reserve/SSSI car park – SJ27072194, June, limestone flora.
- Pont Llogel/SSSI car park, Llwydiarth – SJ03231541, July, calcareous and riparian flora.
- Montgomery Castle car park – SO22159670, May, UI annuals.
- Montgomeryshire Canal SAC – several access points e.g. small car parks at Buttington (SJ24120891) and south of Welshpool (SJ21680530) or on verge of main road by Powys Castle turn (SJ22260612) July, aquatics.
- The Breiddens (forest car park at Criggion) – SJ29531496, May, to access Rodney's Pillar, UI annuals and others.
- Llyn Gwyddior – parking on laneside around SH92030749, footpath then on open access land, July.

We have an informal Flora Group and meet several times throughout the year for outings. Contact: k.thorne@btinternet.com.



Flora Group at Llyn Ebryr. Steve Attwood

Thanks to John Thorne who edited the first draft.

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