

Wales Grassland and Heathland Ecosystem Group Priority Action

Ceredigion Hinterland Marshy Grasslands

Habitat summary

Marshy grassland remains frequent in parts of west Wales, but in recent years many sites have suffered species impoverishment due to management neglect. Agricultural improvement, including drainage, continues, although at a reduced level compared to past decades. Stands of marshy grassland in Wales fall mainly within NVC communities M22 to M26, but are seldom found in isolation, being especially closely associated with flush and wet heath communities, in addition to dry grassland and mire vegetation. The mixture of these vegetation types is often broadly termed 'rhos pasture'.

Three of the above NVC communities are of particular conservation interest: M22, M24 and M26. Each of these is characteristic of base-enriched soils and may occur on deep peat (=fen/mire) as well as shallow peaty or mineral soils (= marshy grassland), although the latter are the most frequent. M24 is by far the most widespread of the three in Wales, occurring throughout the region (435 ha recorded on grassland sites); M22 (30 ha) and especially M26 (3 ha) are very restricted. M24 and M26 form the Annex 1 habitat ***Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)**. M22 to M26 on shallow peat or mineral soils form the BAP habitat **Purple moor-grass and rush pastures**. M22, M24 and M26 are lowland communities which barely ever extend beyond the upland boundary, whereas M23 and M25 are quite common above the upper enclosure limit, albeit typically as relatively species-poor stands.

Several Section 42 species are associated with marshy grassland in Wales. Marsh fritillary is closely associated with marshy grassland hotspots in Wales, and especially areas with a strong presence of M24 (the larval food-plant devil's-bit scabious *Succisa pratensis* is a constant of the community). *Succisa* may occur in associated habitats such as wet heath, mire and species-rich neutral and acid grassland (especially MG5c and U4c). Plant species associated with marshy grassland in Wales include lesser butterfly-orchid *Platanthera bifolia*, globeflower *Trollius europaeus* and fragrant orchid *Gymnadenia conopsea* (probably both *G. densifolia* and *G. borealis*). The habitat is important for a number of other uncommon or restricted plant species, including the oceanic Atlantic whorled caraway *Carum verticillatum* and meadow thistle *Cirsium dissectum*, Welsh marshy grasslands supporting a significant percentage of the UK resource of these species. Other species include various marsh orchids (including *Dactylorhiza purpurella* and *D. praetermissa*), petty whin *Genista anglica*, soft-leaved sedge *Carex montana* and ivy-leaved bellflower *Wahlenbergia hederacea*. Increased grazing management should also benefit bird species such as lapwing and curlew.

Marshy grasslands require low intensity management with no applications of fertiliser or lime and grazing by heavy livestock, ideally cattle or hardy ponies. Haymaking may be appropriate for some sites.

Marshy grasslands are important for storage of soil carbon (many stands occupy organo-mineral soils) and water quality and storage.

Ceredigion Hinterland summary

Marshy grassland/flush/wet heath complexes are a particular feature of this area. This is also the core area for *Platanthera bifolia* in Wales; this species is mainly found in base-rich marshy grasslands and flushes in Wales, but also occurs in neutral hay meadows. Marsh fritillary is widespread but localised. This species is mainly associated with marshy grassland (notably M24), but may be present in other habitats in which the larval food plant *Succisa pratensis* is frequent, notably neutral grassland (MG5c) and acid grassland (U4c), as well as wet heath and fen. The project area includes several important

sites for M24 and some significant stands of MG5 and U4c. There are scattered *Trollius* populations towards the south-western edge of its British distribution.

BAP area: Ceredigion.

The Ceredigion Hinterland project area includes:

1. Principal networks for marsh fritillary, including SACs Rhos Talglas and Rhos Llawr-cwrt.
2. 14 grassland sites with 0.5 ha or more of M24.
3. Several sizable MG5c and U4c stands on rhos pasture complexes.
4. Three populations of *Trollius europaeus*.
5. Some 30 sites with records of *Platanthera bifolia*.
6. Associated rhos pasture such as wet heath, flush and mire.

Action required

- Maintain or re-establish appropriate management on existing high-quality sites (mainly SSSI and pSSSI), focussing on sites forming part of marsh fritillary metapopulations, sites with sizable areas of M24, MG5c or U4c and sites with significant populations of Section 42 plant species. Prioritised lists of sites and vegetation maps should be utilised.
- Re-establish appropriate zero input management with grazing by heavy stock on neglected sites. Reinstating grazing may require improved stock management infrastructure and/or scrub/bracken clearance. Restoration sites should bolster existing sites or improve ecological connectivity, e.g. for marsh fritillary metapopulations.
- Habitat creation is not a high priority, as it typically takes considerable time and expenditure, but may be appropriate in a few situations, e.g. to bolster important existing conservation sites/populations. Marshy grassland creation has been attempted at Rhos Llawr-cwrt NNR with a degree of success.

Key marshy grassland/rhos pasture/S42 species conservation sites in the project area

Site	Notes
Rhos Pilbach a Pennar Fawr SSSI & Annexe	Large M24, sizable MF population
Rhos Gellie SSSI & Annexe	Large M24
Cors-y-clettwr (NNR/SAC)	key MF site along with Rhos Llawr Cwrt
Rhos Llawr Cwrt (NNR/SAC)	key MF site
Rhos Gyn-y-helyg SSSI	Sizable MF population
Silian Common SSSI	Large M24
Ty'n-y-gwndwn	Several 100 Pb recorded in 1994, mainly in neutral grassland. Important Dv population
Rhos Talglas SAC & Annexe	Good Pb population. Sizable MG5c. MF SAC
Rhos Bryn Hir SSSI & Annexe	part of important cluster
Glanrhocca SSSI	Large M24 and MG5c, sizable associated MF population

Bryn-y-maen	Large mixed Rhos pasture
Comins Capel Betws SSSI & Annexe	part of important cluster
Rhos Bron-yr-helem SSSI & Annexe	Large M24 and MG5c, sizable associated MF population
Rhosydd Camddwr	Large M24 with extensive other marshy grassland and sizable U4c
Gilfach Gwyddil SSSI	Large M24
Cwm Meurig/Caeau Hendre	Large M24 with extensive other marshy grassland and sizable U4c
Cors Caron wet grasslands	Mixed rhos pasture
Cors Caron marshy fringes	The fringes of the bog have significant populations of Pb
Cors y Sychnant SSSI	Mixed rhos pasture
Rhos Gargoed SSSI	Important Te population
Caeau Gwar-llethr	Complex of neutral and marshy grassland
Cwm Wyre	Complex of neutral and marshy grassland. Gc.
Rhos Cwmsaeson SSSI	Important <i>Viola lactea</i> population.

Action on SSSI should be discussed and agreed with local CCW staff.

Species Interest

Key Section 42 species

Marsh fritillary	<i>Eurodryas aurinia</i> (MF above)
Globeflower	<i>Trollius europaeus</i> (Te above)
Lesser butterfly-orchid	<i>Platanthera bifolia</i> (Pb above)

Other Section 42 species

Frog orchid	<i>Dactylorhiza viridis</i> (Dv above)
Field gentian	<i>Gentianella campestris</i> (Gc above)
Wood bitter-vetch	<i>Vicia orobus</i>
Pale Dog-violet	<i>Viola lactea</i>
Fragrant orchid	<i>Gymnadenia conopsea</i>

The project has potential to benefit a range of S42 fauna, including:

Skylark	<i>Alauda arvensis</i>
Eurasian curlew	<i>Numenius arquata</i>
Northern lapwing	<i>Vanellus vanellus</i> ,
Grasshopper warbler	<i>Locustella naevia</i> ,
Reed bunting	<i>Emberiza schoeniclus</i> ,
Adder	<i>Vipera berus</i> ,
Grass snake	<i>Natrix natrix</i>
Brown hare	<i>Lepus europaeus</i>
Bat species.	

Other notable plant species

Whorled caraway	<i>Carum verticillatum</i>
Meadow thistle	<i>Cirsium dissectum</i>
Marsh valerian	<i>Valeriana dioica</i>
Petty whin	<i>Genista anglica</i>
Dyer's greenweed	<i>Genista tinctoria</i>
Southern marsh-orchid	<i>Dactylorhiza praetermissa</i>
Northern marsh-orchid	<i>Dactylorhiza purpurella</i>
Early marsh-orchid	<i>Dactylorhiza incarnata</i>
Green-winged orchid	<i>Orchis morio</i>
Greater butterfly-orchid	<i>Platanthera chlorantha</i>
Ivy-leaved bellflower	<i>Wahlenbergia hederacea</i>