Wales Grassland and Heathland Ecosystem Group Priority Action

South Wales Valleys Marshy Grasslands/Rhos Pastures

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). 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 Atlantics 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.

South Wales Valley Summary

This is the most important area for M24 in Wales (and significant in a British context) and the key area for marsh fritillary, stretching from east Carmarthenshire, along the southern fringe of BBNP, to Aberdare. The area supports scattered populations of *Platanthera bifolia*, *Trollius europaeus* and *Gymnadenia conopsea*.

BAP areas: Carmarthenshire, BBNP, Glamorgan RAG, Powys.

The Heads of the Valleys project area includes:

- 1. Principal networks for marsh fritillary, including SACs Caeau Mynydd Mawr and Blaen Cynon.
- 2. Over 50 grassland sites with 0.5 ha or more of M24, eleven of which were considered outstanding examples for M24 by the Lowland Grassland Survey of Wales (LGSW).
- 3. Four of the most southerly populations of *Trollius europaeus* remaining in Britain.
- 4. Four *Platanthera bifolia* populations at the south-eastern edge of its range in Wales.
- 5. The project area also includes significant stands of other habitats, notably unimproved neutral grassland (including stands of MG5c which can provide suitable marsh fritillary habitat), wet heath and flush, as well as mire vegetation.

Action Required.

- Maintain or re-establish appropriate management on existing high-quality sites (mainly SSSI and pSSSI), focusing on sites forming part of marsh fritillary metapopulations and/or with sizable areas of M24, and/or Section 42 plant species. Prioritised lists of sites 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.

Priority Zones for Action (see map)

Mynydd Mawr Hirwaun Capel Gwynfe Nant-y-crimp Pantardawe Ystradgynlais

Other Key Zones

Glanaman Llandeilo

Species

Key Section 42 species

Marsh fritillary Eurodryas aurinia
Globeflower Trollius europaeus
Lesser butterfly-orchid Platanthera bifolia

Fragrant orchid Gymnadenia conopsea s.l.

Other Section 42 species

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

Skylark Alauda arvensis
Eurasian curlew Numenius arquata
Northern lapwing Vanellus vanellus
Grasshopper warbler Locustella naevia
Reed bunting Emberiza schoeniclus

Adder Vipera berus
Grass snake Natrix natrix
Brown hare Lepus europaeus

Bat species

Other Plant Species

Whorled caraway

Soft-leaved sedge

Meadow thistle

Marsh hellebornine

Petty whin

Carum verticillatum

Carex montana

Cirsium dissectum

Epipactis palustris

Genista anglica

Broad-leaved cotton-grass Eriophorum latifolium
Southern marsh-orchid Dactylorhiza praetermissa
Ivy-leaved bellflower Wahlenbergia hederacea