

# Wales Grassland and Heathland Ecosystem Group Priority Action

## Floodplain Grassland of Radnor

### Habitat summary

Wales has extensive areas of floodplain land (estimated at over 40,000 ha; Dargie & Dargie, 1998), but this has mostly been converted to improved grassland and semi-natural habitats are fragmentary. Unimproved neutral grasslands (BAP = **Lowland meadow**) on floodplain land are particularly rare in Wales, but would once have been more common (Stevens et al, 2010). Two neutral floodplain grasslands are described in the NVC, *Alopecurus pratensis* - *Sanguisorba officinalis* grassland (MG4) and *Cynosurus cristatus* - *Caltha palustris* grassland (MG8), but the Lowland Grassland Survey of Wales (Stevens et al, 2010) recorded only 9 ha of MG4 and 3 ha of MG8. These remnant stands are mostly found in the eastern part of Wales, close to the English border, in the districts of Wrexham, Montgomery and Radnor. Outlying stands of MG4/8, or MG5 with flood meadow affinities, occur in Anglesey, Gwent and West Glamorgan.

MG4 is the representative community for the Annex 1 Habitat **Lowland hay meadow** in Britain. MG4 and MG8 form, along with MG5, the BAP Priority Habitat **Lowland meadow**. Floodplain grassland (improved as well as semi-natural) also falls within the **Coastal and floodplain grazing marsh** Priority Habitat.

Unimproved neutral grasslands on floodplain land support a range of uncommon or geographically restricted plant species, including greater burnet *Sanguisorba officinalis*, pepper saxifrage *Silaum silaus* and common meadow-rue *Thalictrum flavum*. Two S42 plant species marsh stitchwort *Stellaria palustris* and tubular water-dropwort *Oenanthe fistulosa* occur in MG4 in England and are associated with rush pasture on floodplain land in Wales (e.g. The Wern (Montgomeryshire), Malltraeth Marsh (Anglesey)); introduction of these species to re-created sites could be considered. Some floodplain sites are important for breeding waders.

Opportunities for the re-creation of unimproved neutral grassland (MG4 and MG8) on floodplain land should be sort for the following reasons:

- The habitat is uncommon and very localised in Britain and very rare in Wales.
- The habitat is of European significance.
- Re-creation of the habitat would build on efforts in England by the Floodplain Meadows Partnership and make use of their expertise and knowledge base.
- Re-creation of the habitat could help meet targets under two HAPs.
- Re-creation of the habitat has high potential ecosystem service benefits, particularly relating to water quality and storage.

There is potential for expansion of unimproved neutral grassland on floodplain land throughout Wales, but most ecological gain comes from re-creation close to existing sites: to make them more robust; to improve connectivity; and as existing sites can act as seed/green hay donor sites. Choice of potential restoration sites requires careful consideration of site hydrology and soil nutrient status (Wheeler et al, 2004; Gilbert et al, 2009).

### Radnor summary

Central Radnor supports four of only six remaining Welsh sites with stands of MG4 and over half of the total area of the community known in Wales. The sites are associated with the River Ithon (a tributary of the Wye) and its tributaries, north-east of Llandrindod Wells. Most of the area is considered at risk of flooding by the EA.

The project area includes four separate sections, taking in the four MG4 sites (all SSSIs) and surrounding floodplain land identified in Dargie & Dargie (1998), plus some additional flat or gently-sloping riverside land up to about 4km from each MG4 SSSI. This project area should be regarded as flexible. Not all of the land within this area would be appropriate for grassland re-creation and land outside the project area may be considered appropriate for action on examination. In choosing re-creation sites, making use of existing guidelines and experience is critical (e.g. Wheeler et al, 2004; Gilbert et al, 2009), particularly using the experience and knowledge of the Floodplain Meadows Partnership.

BAP area: Powys

### Action required

- Maintain or enhance the interest on the current SSSIs.
- Re-create areas of floodplain meadow/pasture on appropriate sites, especially sites close to the existing SSSI, utilising existing expertise.
- Highlight the ecosystem service benefits of grassland re-creation on floodplain land, including the benefits of widespread reduction in fertiliser on land prone to flooding.
- Consider restoration/re-creation of other floodplain habitats, such as wetland and floodplain woodland.

### Priority sites for action

Site	Area of MG4 (ha)
FAR HALL MEADOW SSSI	3.5
CAE CWM-ROCAS (CWM ROCHEs MEADOW) SSSI	0.8
CRABTREE GREEN MEADOW SSSI	0.4
CAE LLWYN SSSI	0.1

### Key habitat

Annex 1 Habitat **Lowland hay meadow** (NVC = MG4).

### Species Interest

#### *Section 42 species*

Curlew	<i>Numenius arquata</i>
Marsh stitchwort	<i>Stellaria palustris</i>
Tubular water-dropwort	<i>Oenanthe fistulosa</i>

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

Skylark	<i>Alauda arvensis</i>
Grasshopper warbler	<i>Locustella naevia</i> ,
Reed bunting	<i>Emberiza schoeniclus</i>
Grass snake	<i>Natrix natrix</i>
Common toad	<i>Bufo bufo</i>
Brown hare	<i>Lepus europaeus</i>
Bat species.	

### ***Other notable plant species***

Greater burnet	<i>Sanguisorba officinalis</i>
Smooth brome	<i>Bromus racemosus</i>
Meadow thistle	<i>Cirsium dissectum</i>
Northern marsh-orchid	<i>Dactylorhiza purpurella</i>

### **References**

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