

## **PROPOSED GRASSLAND PROJECTS IN WALES**

### **National Botanic Garden of Wales**

As promised an outline of our proposal to improve some of our grasslands here at the National Botanic Garden of Wales. This will be on land outside the formal garden on what is now A National Nature Reserve - around 300 acres of grassland and 80 acres of native broadleaved woodland.

Our first and most important target is very wet purple moor grass and rush pasture. There is approx 19 hectares of this and some has been badly neglected due to lack of resource - fences, sufficient livestock, correct machinery, etc.

There is another 15 hectares of lowland meadow that needs some help but we are slowly managing this back into better condition and the drier areas we can cope with better with our existing resource. The main problem with the purple moor grass area is restoration - to get off the overgrowth of the last 10 years so we can cattle graze again. There was evidence of interesting plants there such as marsh thistle in recent history - it would look very bad if this plant was lost from a site owned by a Botanic Garden! The fences need serious attention before we can graze all these areas again safely with cattle.

We have recently tried a WREN application for this work that failed although we are likely to put in another application together with Wildlife Trust and Grassland Trust with the help of Charles Morgan, PONT. I need to look at every avenue to make sure I am not responsible for the decline of one of Carmarthenshire's important habitats. I can bring a lot more detail to the meeting on the 5th October.

Thank you for your interest

Tim

Tim Bevan  
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## **Living Highways Project - Powys**

This project is working with the following partners:

Radnorshire Wildlife Trust, Montgomeryshire Wildlife Trust, Powys County Council, Countryside Council for Wales, Mid-Wales Trunk Roads Agency, Powys Verges & Hedgerows group, Biodiversity Information Service for Powys & BBNP, Road Verge Volunteer Surveyors.

The main aims of the project:

Maintain and enhance quality of species rich grassland habitat on Roadside Verges through specific management of Road Verge Nature Reserves (approximately 100) and through improving sustainable management of verges as a whole throughout the county thus contributing to HAP & SAP targets in local BAPs. The project also aims to increase awareness of the importance of flower rich grassland in the wider countryside; using volunteer surveyors from the local area is key to this.

Issues and difficulties and how they have been solved:

Establishing continuous funding and getting policy change enacted on the ground. Difficulties of restructuring within the Local Authority and drastic cuts in budgets have meant that making the project a success has been hindered by the project officer spending too much of their time fundraising as resources have not been available within the Local Authority. The restructuring has also meant that there is a lack of continuous contact. We have tried to tackle the issue of policy change by embedding the project officer within the relevant local authority department, thus they have access to both the policy decision makers and also the on the ground highway teams.

Opportunities and potential:

The purchase of a Seed harvester has allowed the project to diverge into new areas e.g. Re-seeding new development areas with local wildflower mix rather than standard rye grass mix. There is also the opportunity to use verges as wildlife corridors (ecological connectivity) in light of climate change.

The project undertook a successful trial to investigate the feasibility of wide-scale collection of cuttings from roadside verges in Powys, for use in biogas and compost collection. This study was published in a scientific journal and won an environmental award.

What is required?

This project needs long term funding, continuity is important in order to build up a relationship with the landowners. We would also like to see more co-operation with agri-environment schemes as this can be an effective way of funding large-scale conservation management on working farms.

## **Ystradfawr Community Project**

This project is working with the following partners:

Butterfly Conservation, Powys County Council, Ystradgynlais Communities, Countryside Council for Wales

The main aims of the project:

To restore important areas of Rhos pasture (Wales BAP priority habitat) in and around Ystradgynlais (Objective 1 area) that are key to the last remaining population of Marsh Fritillaries in mid-Wales (Wales BAP priority species). The land is part of an old coal workings site and has been neglected to the point where the rhos pasture areas are being scrubbed out. Involving the local communities in turning this area into a wildlife and community resource would be a major focus of this project.

Opportunities and potential:

There is potential to link into the Upper Tawe Valley regeneration project. As the project progresses we would expect to start linking in with other living landscape projects in the area particularly focussing on linking up rhos pasture and other marsh fritillary meta-populations.

The project is based in an objective one area. The urban setting has the potential for any work done to reach a much larger audience, one that may not have considered the health benefits of having a wildlife and community resource on their doorstep. As the largest settlement in Brecknock the potential to involve previously uncontacted resources such as schools and community groups in the regeneration of this grassland is substantial.

What is required?

To enact this community and wildlife project there is a requirement of funding for officer time, preferably over at least five years (we have already written a 10 year management plan). Capital works will be needed to secure the site but this will all be carried out in consultation with the local community.

## **Bumblebees and species-rich grasslands: how one needs the other and both need conservation.**

Dr Pippa Rayner, Bumblebee Conservation Trust



### **Grasslands need bumblebees**

Bumblebees are important pollinators for the majority of the wildflowers that species-rich grasslands support. They are hard-working, as they continue to provide pollination services in cool and/or cloudy weather and work from early in the morning through until evening (honey bees tend to only forage in warm, sunny conditions in the middle of the day). The range of tongue lengths found in a diverse bumblebee community ensures pollination of a wide range of wildflowers. Long-tongued bumblebee species (including several threatened species) are the sole pollinators for many of the wildflowers that have long corollas, which provide much of the diversity of species-rich grasslands. The loss of bumblebees would have widespread knock-on detrimental effects for flora and fauna. Whilst honey bees are threatened by disease problems, bumblebees are not affected in this way, and so provide more reliable pollination services, delivered by wild and native species.

### **Bumblebees need grasslands**

The relationship between bumblebee conservation and grassland conservation is mutualistic. Bumblebees require wildflowers throughout the foraging season (April through to September) from which to obtain pollen and nectar. Bumblebees are thought to have undergone massive declines, with extinction and near-extinction of several species, due to the widespread loss of flower-rich grasslands that has occurred over the last 75 years. At least half of the UK's 20 'true' bumblebee species are known to have declined considerably in recent decades, two species have become nationally extinct and a further four species have declined in range by over 70%. Only a minority of generalist bumblebee species appear to be thriving, with indications that all bumblebee species are in decline. Of the 24 current UK bumblebee species, six are UK BAP priority species (four of which have important populations in Wales, with five of the six with populations in England).

### **Bumblebees support agriculture and the economy**

As well as being vital for maintaining wildflower communities, bumblebees also provide pollination services for many agricultural crops including many fruit crops. Some crops, such as tomatoes, are only pollinated by bumblebees as they require sonication (buzz pollination). It is thought that together with honey bees bumblebees deliver most of the €14.2bn which Europe's insect pollinators contribute to the economy.

### **Action is needed now**

Continued decline of bumblebees will therefore have huge impacts for both agriculture and conservation alike. Bumblebees rely upon flower-rich habitats for forage and use tussocky and tall grass areas for nesting. Landscape-scale grassland restoration and creation is required to safeguard and expand existing bumblebee populations. This is particularly important for rare bumblebee species such as the shrill carder bee, red-shanked carder bee, brown-banded carder bee and moss carder bee, which have remaining populations in England and Wales.

### **Saving a species from extinction**

The shrill carder bee (*Bombus sylvarum*) is one of the two rarest bumblebees in the UK and is now restricted to just six isolated populations: Somerset Levels, North Kent/south Essex, Salisbury Plain, Gwent, Glamorgan and



Pembrokeshire. I am keen to work with other organisations and with farmers to increase the extent and quality of habitat for bumblebees, particularly in the remaining shrill carder bee areas.

**Working together to create an attractive and multi-benefit project**

A partnership project, which aims to conserve, restore and create species-rich grasslands, with the additional complementary aim of providing habitat for bumblebees, could deliver large scale multi-objective benefits.

**NATIVE BEE / NATURAL GRASSLANDS PROJECT  
DRAFT PROPOSALS for SITE WORK**

Recent research has highlighted the persistence of the native ‘Welsh Black’ bee in parts of south Wales, previously ‘declared’ extinct as a result of introgression or replacement with Italian imports. An enclave of native bees appears to be present in the north-west of Pembrokeshire, between St Davids and Fishguard.

This coastal area also retains good populations of wild bees, including the BAP-listed brown carder bee *Bombus humilis*. There are also previous records of the shrill carder bee *Bombus sylvarum* and the mining bee *Osmia parietina* from the St Davids area, but these species may now be extinct.

Wild-flower rich grasslands are also a bit thin on the ground in this part of Pembrokeshire – a recent CCW survey found less than 5 hectares of traditional (NVC: MG5) herb-rich meadow/pasture. Although Tir Gofal has 82 hectares of land in the area classed as unimproved, semi-improved or reverting, agreements are sparse. There should therefore be the scope to run a specific ‘Habitat Scheme’ style project, whereby individual fields or clusters of fields were targeted for conservation management.

Both grassland reversion and heathland re-creation would tie in very well with wild bee conservation, native honey-bee conservation and the promotion of the honey derived from it. Dialogue with both amateur and commercial beekeepers would engage a new, receptive group in grant-led habitat conservation work (WTSWW already have links with Beelief Ltd and a number of amateur apiarists).

Branding would be central to this project. I envisage a ‘conservation-grade’ label (wild bee honey? Welsh black honey?) with a premium price attached to it. A simple hive accreditation scheme would be needed, whereby each hive would need to be associated with a conservation project. Perhaps one or more of the following would be required –

- Hive located on or next to a SSSI
- Hive located on or next to a NT / PCNPA / WTSWW / RSPB property
- Hive located on or next to a Tomorrow's Heathland Heritage project site
- Hive located on or next to a (new) grassland reversion scheme, with management prescriptions to ensure maximum wild bee suitability (eg. wide uncut margins in hay meadows, new pool / south-facing bank creation)
- Hive located on or next to a heathland re-creation scheme, again with management prescriptions to ensure maximum wild bee suitability

Grazing by Welsh Black cattle would be an additional desirable, and would add to the 'brand image'. Dual promotion with the Welsh Black Marketing society would be a possibility. The St David's Eco-City project could assist with promotion, as would the St David's Really Wild Food Festival. There would presumably be retail outlets available through the NT shop in St David's, Welsh Wildlife Centre, St David's TIC, Ramsey shop etc.

A new grassland reversion / heathland recreation scheme could be delivered through CCW 'streamlined' management agreements. This would be available on any suitable land within the target area, and would involve standardised payments and prescriptions. In order to ensure best practice was applied from an invertebrate standpoint, these prescriptions would be over and above standard agri-environment packages. Volunteer / NGO input could be used to deliver some 'bee-friendly' features such as shallow scrapes or banks. PCNPA Section 39 agreements could perhaps provide an alternative delivery mechanism, or the project could look wholly to external funding.

Matt Sutton  
CCW Pembroke Dock  
November 2004

## **SOUTH WALES VALLEYS GRASSLANDS**

Re: The Saving our Magnificent meadows Life Bid and proposed projects I note there is nothing for the south Wales Valleys and the concentration of MG5/MG6 grasslands and pastures which lie along both the southern and northern edges of the coal belts (across the southern and northern edges of the Valleys) or the concentrations of neutral grasslands (including species rich floodplain grasslands) which occur in some of the wider Valleys e.g the Cynon Valley. I would strongly recommend that this is a National Importance concentration of neutral grasslands which deserves some conservation attention and should be added to the possible Life Bid.

One of the fascinating features of Valleys is the way apparently species poor semi-improved (or even improved) neutral grasslands can quickly recover and revert to really nice MG5 by just removing excessive grazing (it is something we see time and again on development sites). In my opinion, when it comes to assessing the grassland resource in Wales there is (in the Valleys) a sleeping resource of grassland which can be easily awakened with appropriate management. CCW Phase I missed this because it was bound

to miss grasslands that were actually OK, but looked species poor because of management. The condition of the vegetation at any one time in history is (in my opinion) much less important than the soil structure and the extent of soil improvement - none of this of course makes assessing grasslands any easier, but in terms of spending limited moneys on habitat restoration initiatives, it seems a very important consideration. Has anyone looked at where the most easily recoverable neutral grasslands in Wales are? In areas like the South Wales Valleys (and Valleys fringe), agricultural improvement has often been limited by circumstance and topography, and the evidence seems to strongly suggest that grassland soils with the potential for species-rich communities have as a result often survived.

The horse paddock issue is a very important issue in the Valleys where many neutral (and acidic) pastures are severely over-grazed. There are various possible initiatives. If, for example Local Authorities, or Welsh Water or FC or any other NERC Body let grazing can they be offered assistance in developing enforceable grazing licence which ensure conservation level stocking rates and preferably the potential for Sites to be rested for periods of the year. Too often, too smaller an area of grassland is let for too many horses - how can the Lowland Meadow Action Plan focus on and help to tackle this? I know it is ridiculously to talk about the horse owning community - because they aren't a community just a lot of people with horses and small fields (and in all fairness horse owners don't seem to know anything about grassland conservation), but if there was an opportunity to develop a pilot project or two, which got people with horses and land to work collectively on management (i.e. moving horse between fields through a year) this might provided some interesting case studies of how horsy-culture might be more beneficial for grassland management. A few years ago a large horse stabling area in RCT tried to get into Tir Gofal - it failed because it couldn't score highly enough - but that site supports a significant area of neutral (and marshy grasslands) all grazed to a billiard table height, but all obviously capable of supporting high quality grasslands. The opportunity to work with the Site owner (who is not unsympathetic) to try and get better grassland management would be really worthwhile (and I am sure we'd learn alot), but Tir Gofal doesn't fit and there is nothing else.

I've ccd in grassland experts from CCW south Wales for their information - in particular with regards to the possible LIFE bid,

All the best,

Richard Wistow  
Rhondda Cynon Taf Ecologist

## **BREACON BEACONS GRASSLANDS**

Meadow restoration through seed harvesting and donation of seed to suitable sites. Aiming to provide seed for landscaping projects on development sites and to any interested farmers, in particular those with TG meadows which are species poor.

Harvester paid for by partnership between Living Highways Project and Powys CC - operated by BBNPA and National Trust Mid & SE Wales.

Gareth Ellis

Biodiversity Officer / Swyddog Bioamrywiaeth  
Brecon Beacons National Park

## **GRASSLAND FUNGI**

I would be very interested in obtaining funding for a project looking at and recording fungi of lowland grasslands. I have done some recording over the last few years for CCW but it would be great to be able to do it on a much larger scale. If you could please keep that idea in mind for the future I would be grateful - there are very few projects on grassland fungi - not many competent recorders being one issue - we need to keep fungi on the map as without them there would be little else. One pertinent remark made to me recently by a very highly thought of ecologist was that grassland fungi, in particular waxcaps, do not do well on grassland with high quality flowering plants such as orchids etc - totally wrong, they do very well in a lot of cases providing the grassland is cut at the appropriate time following flowering and then kept short over the autumn months.

Sheila Spence  
Field Mycologist  
Gwent Fungus Group

## **EPYNT GRASSLAND**

I've just spoken to Ray Woods about this because I was thinking that the Epynt grassland fungi may fit into this - there is a need to properly assess the Range because Ray thinks from his recording there that it is one of the best sites in Europe for grassland fungi, but there has not been a systematic survey so it is difficult to take anything forward to extend the SSSI (Mynydd Epynt SSSI is designated primarily for *Hamatocaulis* flushes for which it is a SAC but also one of the parcels has grassland fungi assemblage as a feature). It is such a vast area that it really needs some external funding as we're unlikely to be able to cover it ourselves. It was a very brief chat with Ray as he was off out but he agreed that this would be a good idea and is in next week so could discuss it further - he'll probably phone you.

Do you think this would fit in with this as a project - I'm not sure if it would be classed as 'lowland' though - a debatable issue.

Dawn Parry

CCW

**OTHER RELEVANT PROJECTS:**

**Gwella'r Olygfa Improving the View Habitat Restoration Project** – John Osley  
CCW, N. Region

**Pumlumon, Cambrian Mountains**, Sarah Kessell, Wildlife Trusts Wales

**Pembrokeshire Grazing Project**, Mike Howe, Judy Garlick, Pembrokeshire Coast  
National Park

**Caeau Tan y Bwlch, Eithinog, Calaminarian sites**, Dyfed Jones, CCW, N. Region

**Ty Mawr Country Park**, Liz Carding, Wrexham

**Dolydd Byw / Wild Meadows**, Ivy Berkshire, Flora Locale

**Castlemartin**, Matt Sutton, CCW