

Inkberrow Millennium Green

Report of Grassland management group meeting

27/02/2014

Those present: Gareth Thomas, Mark Robbins and Wendy Johnson

The purpose of the meeting was to review the success of past management and to consider whether this may need any modification in the next few years and to look at cutting regimes.

Past Management

We looked at why the grassland is of importance at a county scale and how the original management plan came to be written :

- ⤴ The site was already known from the 1970's county grassland surveys to the County biologists and the Wildlife Trust as an area of relict lowland neutral flower rich MG5 grassland (though its value was thought to have been diminished by the late 1990's) .
- ⤴ This type of grassland was a key biodiversity target for Worcestershire as described in the County Biodiversity Plan.
- ⤴ A Site Preparation Plan was drawn up by S. Rampling in 1998. This recognises the good quality of the grassland on the slopes in both fields. (It makes interesting reading with regard to suggested costs and management).
- ⤴ More than 90% of such grassland had been lost from lowland Britain and Worcestershire had (and has) a big share of what remains.
- ⤴ There was great support in the county at that time for the preservation of such grassland with the establishment of the Grassland Forum and Andrew Fraser from the Wildlife Trust as the driving force.
- ⤴ the County Council invited the IMG trustees to enter into an agreement under section 39 of the Wildlife and Countryside act. The objective so far as the grassland was concerned was to *perpetuate and enhance the botanical interest of the neutral semi natural grassland...*and it included a number of directions, restrictions and conditions mostly relating to grassland management.
- ⤴ The county Council gave a one off payment of £2225 for a 10 year agreement signed in June 2000.
- ⤴ This resulted in the drawing up of the management plan under the guidance of the County Council Conservation and Heritage officer Pauline Homer – completed in September 2001.

In 1999 a survey of the Angiosperms (flowering plants) was organised by Gareth. All species present in 5x2m² quadrats in each of 4 identified communities were recorded. Similar quadrat surveys were repeated in summer 2004 on the MG5 grassland on the slopes in both fields. These form the basis of our detailed knowledge of the plants present in the MG5 community. A survey was also carried out as part of the Worcester County Council review of species rich grasslands by Michael Liley from the Wildlife Trust and in 2004? the Millennium Green was designated a Special Wildlife Site for its lowland neutral grassland.

In July 2006 the IMG Trustees entered into an Entry Level Stewardship (ELS) agreement; this did not affect the grassland management but gave us £104/ yr. In June 2009 we entered into a 10 year Higher Level Stewardship (HLS) agreement which did cause some minor changes to our management mainly to the timings of cutting and removal of all grass cut for hay. In general the grassland management was very similar to that under the section 39 agreement with the same aims of restoring the species rich grassland. This has given us a total payment of £663/yr directly for managing the grassland in HLS and ELS and protecting the ridge and furrow. (A further £1000 comes from educational access).

Has our management been successful?

There are two aspects to this:

1. Is the wildflower grassland on the slopes as good as it was 14 years ago?
2. Have the characteristic species of the MG5 grassland spread into the poorer grassland areas?

Almost all the species present in the surveys are still to be found and some in increasing abundance. We particularly noted :

- ⤴ A marked increase in yellow rattle which was not recorded in the original survey. This helps to reduce the vigour of the coarser grasses.
- ⤴ Lady's bedstraw and meadow vetchling have increased and spread down slope along with other flowers such as bird's foot trefoil. Lb and Mv are the characteristic plants of two sub groups of MG5 grassland and in general Lb is found higher up and Mv lower down on damper or more clayey areas – this is what we see though they also occur together.
- ⤴ Knapweed, which also makes up part of the MG5 grassland community, has held its own but not spread significantly. It is mainly on the steeper slope in field 1 and Mark thought it may be more often found on flatter sites. It is spreading slowly in the poorer grassland above the moat and some appeared by pond 2. There is a little (possibly increasing) in field 2.
- ⤴ Field scabious may have declined in field 1 but some new plants occurred in field 2 in 2013.
- ⤴ There has been an increase in burnett saxifrage – another key species.
- ⤴ Crested dog's-tail , the typical fine grass of MG5 grassland, is declining as coarser grasses such as Yorkshire fog and false oat grass dominate. This has been particularly noticeable in the last few years and may be due to the wetter weather, early seeding of the oat grass and/or the soil still needing further reduction in fertility. Aftermath grazing might also help.
- ⤴ The ant hills in field 1 particularly are being eroded/damaged; probably by badgers. There seem to be fewer green woodpeckers about which feed on the ants. Is this due to weather, less food or disturbance?

Overall we concluded that the original good MG5 grassland on the steeper upper slopes was still as good though the balance of species may have changed. It varies from year to year anyway.

There has definitely been a spread of the characteristic wildflower species down slope and into the grassland in ELS above the moat.

We have some concern about the dominance of coarse grasses in field 1.

The amenity area by pond 1 and the moat is never going to become MG5 grassland as it is too wet with cuckoo flower and creeping buttercup. The larger amenity area between pond 2 and the picnic tables shows some MG5 characteristics with bedstraw and agrimony present and knapweed and scabious near the seat by the pond but it is rather too wet at times.

The grazing management in the second field seems to be working very well with a real increase and spread of Lady's bedstraw, meadow vetchling, agrimony, vetches etc and finer grasses are increasing in some parts. Although we have spread some seed from field 1 it seems likely that the improvement here has also come from the existing seed bank. The future problem will be preventing the regrowth of scrub in the areas recently cleared. The only species loss here has been the one plant of quaking grass once found. On the other hand we have had two common orchids appear. **We conclude that we do not need to make any changes to the management in Field 2.**

Field 1 cutting regime

There are three aspects to consider:

- ⤴ cutting to get the best results for grassland restoration
- ⤴ the costs of cutting
- ⤴ the amenity cutting

There are also three areas (plus the paths) where the cutting regimes may differ:

- ⤴ the upper slopes with the best MG5 wildflower grassland and ant hills
- ⤴ the lower slopes and the area in ELS above the moat
- ⤴ the flat amenity areas

Upper slopes

These are strimmed rather than cut by machine to protect the ant hills so the grass has to be raked up by hand and at present there does not seem to be an alternative to dumping this on site. Cutting usually takes place in early September. This gives time for the knapweed to set seed and for the larval stage of the marbled whites to have entered hibernation deep down in the grass clumps. The cost of strimming has been between £300 and £340 in recent years.

We recommend that this regime continues with Alan Farnsworth .

The lower slopes including ELS

This grassland has to be cut for hay after the 15th July (that in ELS could be cut two weeks earlier but it makes no sense for a contractor to come twice). The exact time of cutting depends on the season as the flowering plants including fine grasses need to be seeding to encourage them to spread. There are further problems with the timing due to the weather and the availability of contractors. The cost of the hay cutting, baling and removal this year was large – around £600? The rate of £35 /hr. is quite high; plus the baling and removal costs per bale. Presumably the hay bales should have some value.

We recommend that other small contractors and people who may want the hay are investigated. Wendy will investigate who cuts Sands Lane meadows for the Wildlife Trust. It may be worth contacting the 'horse community' who appreciate wildflower hay and also the possibility of small bales. Should we consider aftermath grazing in Field 1?

The amenity areas and paths

Economically it makes sense for the main cut of both amenity areas to be included with the hay cut of the lower slopes. It also solves the problems of hay disposal and raking up. It means that the two areas should be cut for a good deal of the summer holiday.

We recommend that this timing is accepted for the duration of the HLS agreement.

HLS brings restrictions on cutting times but we can do an early cut (March or April) or one area could (alternating years) be cut as late as May. These two amenity areas could also be cut again later in the year (say late September) but this all comes at a cost.

Over the past few years **the paths** round field 1 have been cut regularly by Chris Bonehill and he has topped the amenity areas when not included in the hay cut. He knows the site and understands our requirements. **We suggest setting a budget for paths and amenity cutting and asking Chris to work within this.** Ideally he would keep the paths short enough, do one cut of the amenity areas early or late which would require some raking up, and cut the silt heap in field 2 once in the autumn. This 'amenity cutting' could be what the parish council might pay for in future if there is no funding after HLS ends in 2019.