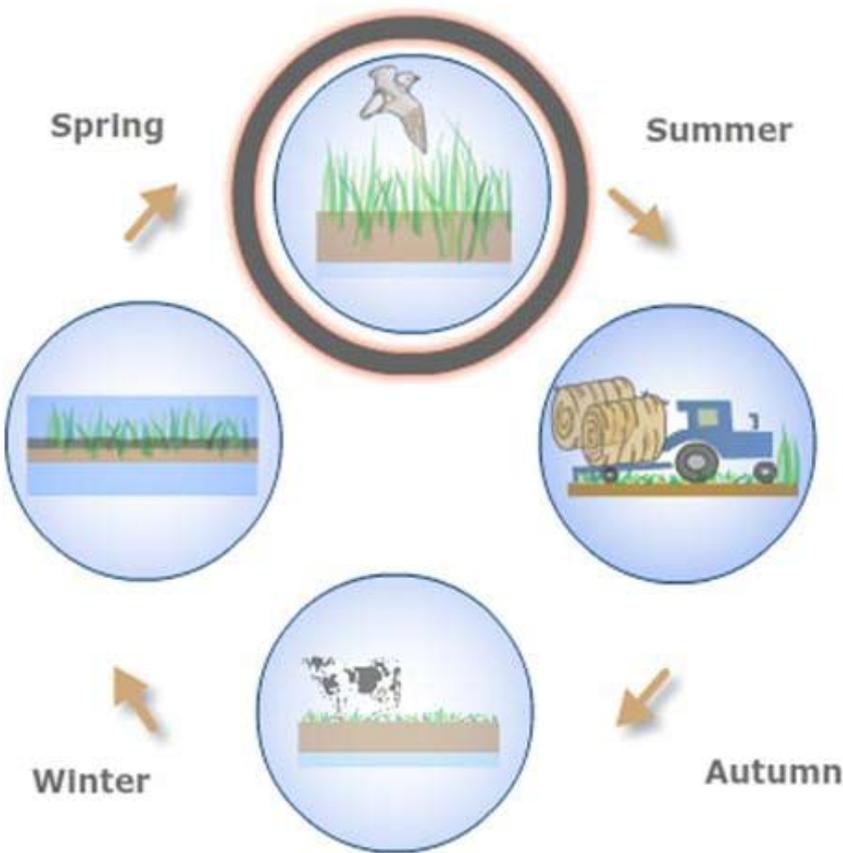


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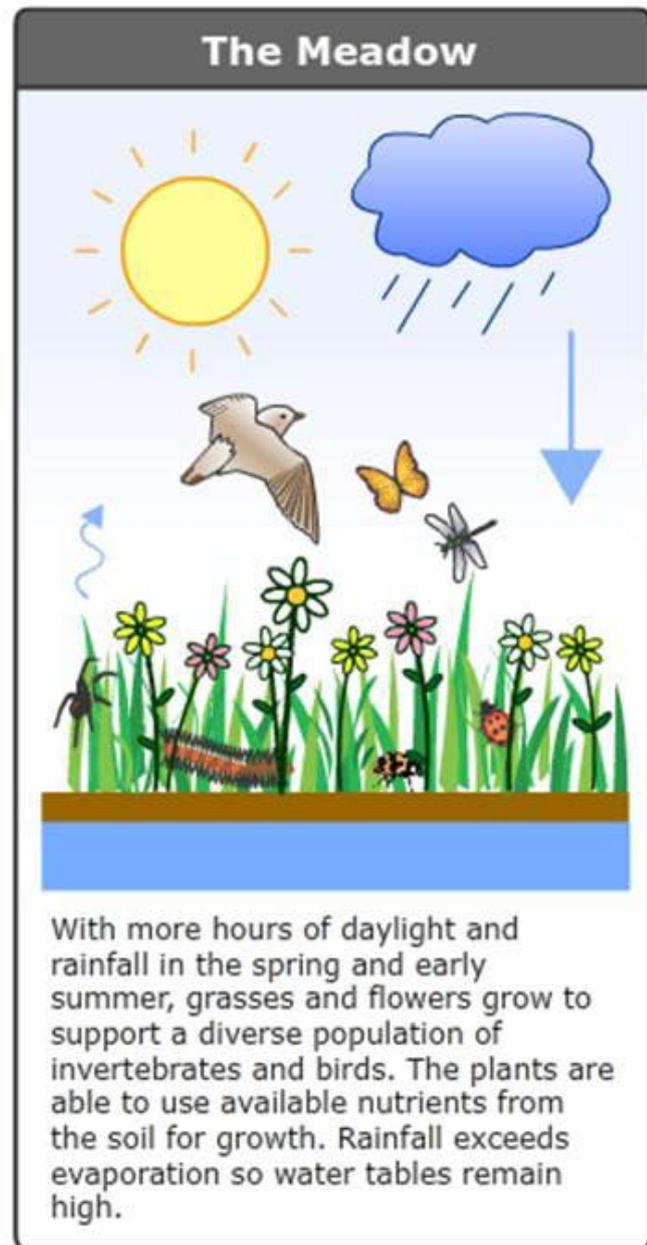
Welcome to the Floodplain Meadows Partnership July 2011 newsletter. This edition we have a special feature on Urban Meadows (pages 5 to 10). Also catch up with what's new on the website (page 4), our current funding situation (page 5) and a summary of our season this year. Find out what Shakespeare thought about meadows and the NVC (page 4) and have you ever tried taking a ferret for a walk (see page 3 to find out how)? Thanks are extended as ever to all our newsletter and project contributors.

The Hay Cycle



The hay cycle. To find out more, go to page 5, and to have a go visit the website <http://www.floodplainmeadows.org.uk/content/hay-cutting-and-grazing>

The Meadow



With more hours of daylight and rainfall in the spring and early summer, grasses and flowers grow to support a diverse population of invertebrates and birds. The plants are able to use available nutrients from the soil for growth. Rainfall exceeds evaporation so water tables remain high.



a million voices for nature



The Light
Owler Trust



The 29th May 1961
Charitable Trust



A Summary of the 2011 Survey Season

This year has been a programme of ever moving goal posts and staff resources, although the weather has been mostly kind, for which we were grateful!

We re-visited the usual long term plots on the SAC sites at Portholme, Oxford, North Meadow, Motte Meadows and the two sites in the Lower Derwent Valley (East Cottingwith and Wheldrake) as well as some of the other sites on which we have long-term sampling points including Oxley Mead, Mill Crook, Ducklington, Fancott and Upham. We are also now monitoring a number of restoration sites including two further sites in the Lower Derwent Valley and one site in Wiltshire that have been cleared by spraying prior to spreading either seed or green hay, and three further sites that are currently species poor and are being enhanced by green hay spreading after the creation of bare patches (Clattinger Farm, Motte Meadows and Upham). We are increasingly coming across more meadows where restoration is being trialled, which is very encouraging, and as the trials progress we will feed back findings.

Once again we also created some space in the programme this year for visiting new sites and had some very interesting visits. We started off in Staffordshire, looking at Stone Meadows and re-visiting Seighford Moor, followed by Iffley Meadows and Chimney Meadows in Oxfordshire, both demonstrating similar problems of getting water off the sites in an efficient manner. We visited Greystones Farm owned by the Gloucestershire Wildlife Trust, including their restoration fields (restoration started in 2007 and looking very promising) and hope to put together a case study of this project for the website. We were also shown around 4 very interesting sites in Worcestershire by the Worcestershire Wildlife Trust and the Evesham Vale Heritage Trust. These sites are very different to the large, open meadows of the larger rivers, and so whilst they have a similar plant community, their landscape and management history are quite different. They also seem to be less likely to have suffered from impacts as a result of summer floods as many of them were on small headwater streams, albeit in the catchments of the larger rivers.



Working with the Herefordshire Nature Trust to set out a repeatable transect line so they can come and survey the Sturts in future years.

We also helped the Herefordshire Nature Trust set up their own monitoring transect on The Sturts Nature Reserve in Herefordshire. They hope to be able to undertake the monitoring of this site in future years. For our Grand Finale, we ended up in Ireland visiting the Shannon Callows.

The big issue this year for landowners and managers seems to have been Marsh Ragwort (see short article on page 4) and early cutting, and the big issue for us has been early cuts, which of course we would not want to prevent going ahead if they are needed, but do impact on our survey programme!! Our surveys will all be shifted slightly earlier in the season next year if we can manage it!

Finally many thanks to all landowners and managers for allowing us onto your sites! We are very grateful.

Events 2011

Fritillary Counting – it could be you!

This year we attempted to up the volunteer numbers at the fritillary counting day, and managed to almost double last year's head count. This was a really good day, the weather was kind (hot even!) and I think everyone enjoyed themselves. We even had some hardy volunteers who came and camped, so well done to them! Next year we would really like to get even more volunteers and extend the monitoring programme to include the regular plots monitored by Natural England. So with a free lunch thrown in, how can you resist? To find out how the day went, watch our podcast of the day **here**, and get in touch through the website if you want to join in.

We also put together some information about Fritillaries this year which has drawn interest. This will be updated and available again next year. The fritillary leaflet can be downloaded from the website by following this **link**.

Workshops

We ran our usual workshop on the 'Management of Floodplain Meadows' aimed at site managers, conservation officers and landowners at Preston Montford FSC Centre again this year. This workshop is proving popular enough to be considered for a routine slot in the FSC calendar every year, so we will advertise the dates for next year once available on the website and through the winter newsletter as usual.

We also ran a 1 day workshop in Oxfordshire aimed at site managers, owners and interested individuals about the Oxford meadows, summarising what the research has been finding to date, updating people on related projects, and introducing a new research project being undertaken on the Oxford Meadows called FUSE. We thought this was a useful way of communicating our findings with people, and getting local interested parties together to share ideas. We hope to run something similar (but elsewhere) next year.

Open days, hay festivals and guided walks

We also attended a number of events including The North Meadow Open Day, Oxford Farms Open Farm Sunday and the Motte Meadows Hay festival. The embroideries of North Meadow produced by the great Western Embroiders (<http://greatwesternembroiders.blogspot.com/> scroll down to see the North Meadow ones), including a depiction of a soil core taken from one of our photos. Ferret racing topped the bill at the Motte Meadows Hay festival. You could also take a ferret for a walk! I recommend it! Watch how much Mel Brown, Motte Meadows Natural England Reserve Manager enjoyed it **here**. I failed dismally at the hay bale throwing contest however....



Another use for hay! Mel Brown, Natural England Reserve Manager at Motte Meadows attempts to get the bale over the bar.



We also visited the **Shannon Callows** in Ireland: a massive area of species rich meadow and grassland in Ireland. What a treat! We were kindly shown round a few of the sites in the Callows at the beginning of July, which are a mix of fantastic species rich meadows, pasture and other wetlands. The meadows are vast, as is the river but there are many similarities in terms of both species composition and management issues.

If your meadowsweet is this big.....Marie Dromie (National Parks and Wildlife Service) and Caitriona Maher (University of Ireland) in one of the less species rich sites. The combination of wetter summers, poor ditch maintenance and late cutting has led to excessive meadowsweet, resulting in a loss of species richness and little in value for the farmer in terms of a hay crop. It is likely that at least parts of the Callows have always been like this.



Non-chemical control of Marsh Ragwort

One of the issues that seems to have re-surfaced this year is that of Marsh ragwort. We reported on this in the December 2008 issue (<http://www.floodplainmeadows.org.uk/files/floodplain/Newsletter%202002%20Dec%202008.pdf>) and also have a leaflet produced by the RSPB and the Open University on the website (<http://www.floodplainmeadows.org.uk/files/floodplain/Marsh%20Ragwort%20Trial%20RSPB%20Leaflet.pdf>) summarising the PhD we have had looking at the issue of non-chemical control of Marsh ragwort.

We are also working with the RSPB again at West Sedgemoor looking at other mechanisms for controlling marsh ragwort including cutting in July and September, leaving uncut and ungrazed for either one year or two.

What's new on the website?

The website is an ongoing priority to keep current and up to date. Here are two new things now on the website:

Information about plants

The information about plants page shows a selection of typical floodplain meadow species (<http://www.floodplainmeadows.org.uk/content/rare-plant-life>) and more detailed information about each one. As more information (and time) becomes available, we will add to the information known about each of these species.

The Hay Cycle

This is a flash based interactive cycle showing what happens to nutrients and water at each different period of the hay year. In spring, the hay crop grows, plants take up nutrients from the soil and water tables remain high. In summer....what happens next? Have a look and see if it makes sense (<http://www.floodplainmeadows.org.uk/content/hay-cutting-and-grazing>)

What did Shakespeare have to say about meadows?

A question you always wanted to ask but never knew where to start? Or something you have never considered before? Well, even in Shakespeare's day, the same problems of meadow management occurred and were clearly in common parlance regularly enough for Shakespeare to make mention. In 'Henry the Fifth' this reference to meadow abandonment is found:

'The even mead, that erst brought sweetly forth
The freckled cowslip, burnet and green clover,
Wanting the scythe, all uncorrected, rank,
Conceives by idleness and nothing teems
But hateful docks, rough thistle, kecksies, burs,
Losing both beauty and utility'

John Rodwell wrote a piece for the website about this and how it relates to the NVC. To find out more about what this tells us, click [here](#).

You can also follow updates on the website through **Twitter** and we will soon have a page on **Facebook!!!** We have finally been dragged (kicking and screaming?) into the age of social networking....



Meadowsweet

Filipendula ulmaria

Flowers June-September. Root smells of antiseptic. White frothy flowers with sweet fragrance.

Soil moisture tolerances

It is found on sites with less than 10 weeks of dry soil per year but 10-20 weeks wet soil per year. It is more tolerant of water logging than drying.

Soil fertility tolerances

It is typically found on moderately fertile sites (10-25 mg P/kg) or P index 1-2.

Traditional medicinal use

Meadowsweet is widely used in herbal medicine and cooking. It can be added to wine, beer, vinegars, stewed fruits and jam to add flavour, and contains salicylic acid, a derivative of which was used to create aspirin. It was once grown commercially for this purpose. Traditional medicine recommends pressing the crushed leaves to your forehead. The root smells of antiseptic.

Suitability for floodplain living

Meadowsweet is a key plant found on floodplain meadows. It prefers damper soils and can indicate the soils are rarely dry. If it dominates to the detriment of other smaller species, then an earlier cut and improved drainage should help to re-establish a balance of meadow species.

Project Funding - very many thanks to our funders

We had excellent news this year about funding for the next three years of the project. The Esmee Fairbairn Foundation have agreed to contribute significantly towards the funding of this project for the second time, alongside the The 29th May, 1961 Charitable Trust. We are very grateful to both of them for their generous contributions and would not be able to continue the project without their help. These funds between them cover the project officer post, but we are now embarking on a fund raising exercise for the other work we wish to undertake, including filling the gaps in the survey programme, sourcing funds for more of the outreach work, and starting the process of finding out more about floodplain meadow sites we have not yet got on our list.



Fences cut down, New Marston Meadows, Oxfordshire

Photo: Judy Webb

SWS conference in Prague 4th-8th July 2011

Two PhD students from the FPMP attended an international conference held in Prague from 4th-8th July this year. The conference was a joint meeting between the Society of Wetland Scientists (SWS), Wetpol and the Wetland Biogeochemistry symposium. Sonia Newman and Katherine Wotherspoon both participated in the environmental change and temperate wet grassland structure and function symposium by giving oral presentations on their PhD research projects. (Management of dominant carex species in UK floodplain meadows and 'The effect of phosphorus addition and altered cutting dates on floodplain-meadow vegetation') Other enlightening symposium included topics such as wetland management, wetland plant ecology, phosphorus and nitrogen in wetlands and wetland hydrology which took place throughout the following five days. There was also a 'women in wetlands' breakfast which is a forum for anyone interested in the role of women in science and promoting female scientists, professors, students, consultants and managers which are associated with SWS.

The conference also included a visit to the wetlands of the Libčochovka and Pšovka river valleys (50 km North of Prague), where there is a mosaic of different wetland types - including springs, alder carr, reedswamp, ponds and wet meadows. This richness in habitat type has led to it being designated an internationally important wetland area and it supports many rare or endangered plant and invertebrate species. It was a great opportunity to experience the wetlands, and in particular wet meadows, of another European country.

Urban Meadows: a management challenge but an increasingly important area for new and old meadows.

One of the issues that has arisen this year during workshops and site visits has been how to deal with meadows that are in an urban environment, or are becoming increasingly urbanised as a result of ongoing development.

The case for conserving these important sites is clear. Not only are they biodiversity hotspots supporting a wide range of species, they also help to make towns and cities liveable for the 80% of the population who are urban dwellers. Natural areas help to keep urban areas cool, they provide natural drainage, and attractive and tranquil spaces like meadows provide invaluable spaces for people to unwind from city life.

However, managing urban meadows to achieve these benefits can be much more challenging than for their rural counterparts, Historically, most meadows would have been rural, as the infrastructure required to maintain them was dependent on a farming system. However in today's world of

increased development, meadows are facing issues that would not have been a problem even 20 years ago. In many cases, the issues are to do with the increased difficulty of delivering the appropriate management due to lack of livestock and lack of appropriate equipment. This, combined with the direct impacts that increasing numbers of people can have on meadows (e.g. damage to plants directly through trampling, soil compaction, fires, fly-tipping etc) plus the issue of dogs creates a list of challenges.

We have asked a few site managers, advisers and volunteers to give us their thoughts on managing an urban meadow, what problems and benefits they bring, and any solutions they have found!

Dogs

Heather Ball, River Nene Project in Northants (Bedfordshire, Cambridgeshire, Northants and Peterborough Wildlife Trust) says 'many visitors to urban meadows are accompanied by a pet dog. Although many dog-owners do behave responsibly, conflict between dogs and grazing animals is one of our biggest problems. This happens even on rural sites, but in urban areas people are less understanding of the livestock. This deters farmers from wanting to graze our sites, and along with other issues has led us to having our own grazing animals. This gives us more flexibility but brings with it a lot of responsibility and takes a lot of staff and volunteer time to manage. Dogs can also cause disturbance to ground-nesting birds, and the litter caused by small plastic bags being hung in trees is both unsightly and potentially damaging to wildlife'.



No explanation needed!
New Marston Meadows

Photo: Judy Webb

Dr Judy Webb from the voluntary New Marston Meadows Wildlife Group, Oxford adds 'there is a lot of dog mess in the meadows and whilst this may not be such a problem perhaps in these meadows that can take higher nutrient levels than some grasslands, there may be an issue about the safety of hay cut for stock if contaminated by dog faeces. Vegetation on the path edges receiving most faeces and urine is definitely different so there is localised nutrient enrichment happening'. New Marston Meadows is a small and privately owned site, and Oxford has a large transient population, so the group collect information about the site to assist the tenant farmer and Natural England in dealing with some of the issues, and they encourage public education about the meadows and their enjoyment in a non-destructive way.

Ian Elphick (Hucclecote Hay Meadows SSSI & LNR, Robinswood Hill Country Park & LNR, and Alney Island LNR, all within the confines of Gloucester City Council) adds 'of course bales get 'decorated' by dogs if they are near a path, so making small stacks of them in the field, away from paths reduces the risk of having to handle contaminated bales (yeeuch!). Unfortunately foxes don't stay so close to paths as dogs often do, so ideally lift 'em quick! The other contamination of bales comes from the sticks that are thrown for dogs getting picked up by the baler.



Gloucester cows and calves on Robinswood Hill
Housing estates start just beyond the hedges.

Photo: Ian Elphick

Within the River Nene Project, Heather says 'in some cases we are looking at fencing the paths out of the grazing compartments so that dogs are kept separate from the stock, but this costs more, has implications for future site management, and affects the visitor experience. We put up signs asking for dogs to be kept on leads, but these often get removed or vandalised and it is not possible for us to police the sites at all times to make sure dogs are on leads.

When we take on new sites we plan well in advance how we will manage the site according to where people are already walking with dogs, and where dogs are frequently let off leads. This may mean managing more areas by cutting, with less aftermath grazing, but does attempt to contain the problems to specific areas. We also aim to work closely with the local community so that they appreciate the value and sensitivity of the site. Not all dog owners are to blame. But the few are forcing us to implement blanket solutions.'

Ian says 'we have found that Old Gloucester cattle are a really good choice of cattle for stock if you have this option as not only are they generally docile and manageable, they don't seem to be fazed by dogs; simply lowering their horns to face any that get too close. When we are moving cattle back into an area after a period of absence, we put up notices so that those with less manageable dogs are aware. In 12 years, we have only had two minor incidents. At no time have we had a situation where cattle chase, or surround people and / or dogs, nor have we seen evidence of dogs chasing cattle – the older animals just don't bother to move so the dog backs down – younger animals seem to take their cue from this'.

Motorbikes

'Motorbikes using sites such as Ditchford Lakes and Meadows in the Nene Valley can be very damaging' says Heather 'they chase or spook the cattle, causing them to jump the fence onto neighbouring land and a busy dual-carriageway.

Fences are often damaged to allow access for the motorcycles, and areas of the site are churned up and rutted. This is currently being addressed by the police and neighbouring landowners as the problem originates on a neighbouring site."

Mick Phythian from the voluntary Friends of Rawcliffe Meadows group, York, says they also find motorcyclists to be a problem as they use the cycle track, harass the cattle, and disturb the peace and at the Gloucester City Council sites, Ian says they go to a good deal of trouble to keep their sites bike-tight. The Sustrans cycle route on Alney Island has Centrewire motorcycle barriers fitted over custom mini-cattle grids to keep motorcycles out and cows in, while still allowing cycle access. They had specified K-barriers to the County Council as they thought they were better, but were not successful in getting these put in. Otherwise a combination of stiles, kissing gates and aggressive patrolling by rangers keeps most out. Even with all this, they currently have an off road bike reported almost daily – but only seen once from a distance. They record all reports / sightings with the police – if it starts to get out of hand they are then aware of it, and put in more effort on the surrounding roads.

Litter

'In particular litter, glass bottles and other rubbish are a problem at Rawcliffe', says Mick, 'not just aesthetically but in terms of managing the site with hay cutting machinery and when stock are present. The volunteers spend time clearing rubbish from the site. Deposition of cars that are ram-raided through fences and gates before being deposited on the meadows or even the river has provided another source of litter and strong gates have been erected at the main entrance (although chains are

sometimes cut presumably for their scrap value!'. Judy adds, 'picnic litter, (some of which will be hazardous to stock later including broken glass and metal) are all also an issue for the landowner and tenant farmer at New Marston.

Damage from cars driven onto Ditchford Meadows, Northants



Photo: Heather Ball



Volunteers pick up litter, Rawcliffe Meadows, Yorks

Photo: Mick Phythian

Bonfires

Bonfires are a problem on various sites. 'Party goers often start bonfires, using site fences and trees as the fuel', Mick explains. 'The fences then have to be replaced to keep the cattle in. School children can find the idea of setting light to hay bales appealing and so the hay cut is now carefully timed to try and avoid school holiday periods'.

Burn damage to the sward and change of vegetation from species rich hay meadow to thistles and nettles in the years following has been noted at New Marston Meadows and log piles left following willow management are often used as fuel as well. In Gloucester, Ian says they try to make sure that bales are lifted from the more heavily used or public areas on the same day as baling to avoid them being burnt. However, lifting all the bales manually from field to trailer, then trailer to barn is labour intensive, and time consuming.



Photo: Judy Webb

Fire damage at New Marston Meadows, Oxford

Compaction

'People not sticking to the official paths is also a problem', says Judy, 'and on a relatively small site such as New Marston this can lead to significant loss of habitat through trampling damage. New paths being made across the middle of the meadows has resulted in loss of the species rich sward to perennial rye grass and greater plantain (both species found in areas that suffer from compaction). Even the established paths are getting wider and suffering from erosion in the middle, resulting in wide muddy churned up areas in the winter. Compression of the sward in picnic areas is also a problem. In Gloucester, the rangers have dealt with this problem by cutting 2 m wide paths on desire lines and Ian says this seems to encourage the majority of people to stay on them. This also helps to show people the meadow is being managed.



Photo: Ian Elphick

Fence Damage

The other major issue raised was fence damage. Judy says 'fences are being broken down to obtain better access and barbed wire put up by farmer to contain stock has also been cut. Notices the farmer puts up are ripped down'.

Ian adds 'when we initially put in some permanent fencing, despite several months on consultation and posting of notices, we had a long period of regular fence cutting. We had put in access points at all the obvious paths, and there was often no apparent reason for the cutting. We replaced some sections of post & wire with post & rail so it couldn't be cut with wire cutters. Having also moved from sheep grazing to cattle grazing (sheep spent too much time running from people / dogs, rather than eating!), we replaced cut sections of stock mesh

with strands of barbed wire (with a plain wire bottom strand to reduce the risk of damage to dogs in full flight). This has eventually led to a halt in the cutting – we can only surmise that 'someone' thought that 'wildlife' (badgers, foxes, rabbits) couldn't get through the stock mesh. Visitors have welcomed the most recent fencing as they love to see the cows – result!

Electric fencing is more of a problem. Installing 'walk-throughs' allows access while still keeping in the cattle, but it seems that most of the damage is vandalism – we suspect from the desire to see the flash and sparks when something is thrown at the wire as it does on the television!! We use multi-stranded wire, with an additional strand of polytape to improve visibility, and plenty of 'caution' signs attached to the wire, particularly along path edges. The wire is cable tied to the tread-ins, and we run the wire in

Paths deliberately cut across a meadow in Gloucester- this results in some loss of meadow, but does tend to keep people on track as their feet stay drier! This is the Toboggan Slope - as soon as there is a hint of snow it is heaving with people. This has been going on for decades, and doesn't seem to hurt the grassland!

straight lines and use wooden posts (or trees) with screw-ins at all turning points (make sure you remove the screw ins at the end of the season – otherwise the trees eat them!!). The fence unit and battery is contained in a locked steel box, chained to a tree (even then we have lost one!) – unfortunately Gallagher no longer seem to make them so we now have had to have our own made. All we can really do is check electric fencing at least daily (often twice – particularly at weekends). Electric fencing is generally only used during the winter when fewer vandals are about, and it gets dark and cold earlier.

Of course, if a certain part of a fence is obviously cut regularly to allow access (albeit unauthorised), then put in a stile, squeeze, or even kissing gate so that at least the access is managed and less likely to allow livestock escape as would cut fencing – not ideal, but manageable. We ended up putting in 2 squeezes within 15 metres of a kissing gate and each other – fence cutting stopped though!

Securing hay cutting and grazing

Some of the initial problems at both the Rawcliffe and the Gloucestershire sites revolved around getting a hay cut and grazing organised. In Gloucester, although the conservation value of the meadows had been recognised for many years there was little management for conservation, apart from the SSSI, until the late 1990s. Ian says ‘many of the less accessible grasslands were simply flail-mown during the winter, which has now left us with a legacy of increasing areas of nettles, thistles and docks. Some of the fields were cut for hay, either by the Countryside Unit, or by a contractor. The timing and frequency of hay cut was somewhat erratic, due in part to the contractors cutting earlier than ideal, and their not wishing to damage their machinery on the ridge & furrow, and the ‘poor’ quality of hay due to all the ‘weeds’! When cut, we were generally charged for the job.

Using Stewardship funds, the Unit set about acquiring mowers, haybobs and balers, enabling us to cut as and when we wished (weather permitting of course). Until this year, the Council’s own City Farm (part of the Countryside Unit) used all the hay we could produce. However, the budget cuts have resulted in the takeover of the City Farm by a charity, so we are now selling the hay to them (at a price designed to encourage them not to go elsewhere!). We also plan to sell our best hay on the open market to raise revenue’.

At Rawcliffe, the early years were spent removing weeds such as creeping thistle and dock initially by spraying and then through the hay cut. At first, the arisings were disposed of as bedding to local farmers and then as the hay quality improved they were used as hay. Eventually they found a farmer who was willing to both graze and cut the hay, and although the payment for the crop is minimal this does at least ensure the meadow is managed properly.

Ian adds ‘meadow hay is now becoming so expensive, and desirable that it may be possible to sell as a standing crop, to a local fodder merchant who can organise the cut and removal. Alternatively, contacts such as a City Farm, or a local hobby farmer or Rare-Breeds Survival Trust member, may be able to organise a hay cut and grazing – worth a try if all else fails.

All the projects mentioned undertake public engagement projects, from guided walks, volunteer tasks, and public presentations to appropriate PR such as newspaper articles and blogs. These do help, as do appropriate notices, interpretation boards and leaflets about sites. Ian adds ‘I know it seems at times like a constant battle, but 12 years has seen our visitors change from” but there are cows in all the farms around here – why do we need more?” and “but the cows will just eat all the flowers and trample them” to “we love coming here to show the cows to the children / grandchildren – you can get so close” and a simple “I really appreciate what you are doing – The Hill looks better than it has for years”. Nothing comes easy that is worth doing – particularly on the urban fringe!’

Samantha Lyme, Natural England’s Urban Specialist, with many years experience of working with wildlife in London summarised some solutions that have proved successful elsewhere. She says ‘managing sites in an urban landscape brings about some specific challenges, usually due to their smaller size, location and a lack of a traditional agricultural infrastructure, however site managers can and do overcome some of these issues. The exact solution will vary from area to area but the following have proved to be successful and are worth considering:

- Setting up a machinery ring to acquire and share appropriate machinery;
- Joining up individual sites in one funding bid for capital or long term management grants. It is possible to do this for HLS provided the necessary agreements are in place;
- Being flexible with your choice of stock. Cattle are often more suited to urban site grazing and there are examples of ponies being used for restoration grazing where the alternative was no grazing at all. Of course different stock have different impacts on the sward and monitoring should be in place to inform ongoing stock choices.
- Making the most of the people close by and involving the community. Volunteers can be invaluable, acting as lookers, carrying out practical work and helping others to enjoy the site by helping with guided walks and links back into their community. Funders often look favourably on conservation projects that offer the local people a chance to be involved.'

She is happy to be contacted for further advice and guidance on 0300 0602158.

More information about managing and creating urban meadows can be found on the Landlife website (<http://www.wildflower.co.uk/>). Landlife are a charity focusing on the urban and urban fringe areas creating wildflower rich areas and encouraging people to get involved.

Regardless of the challenges we face in managing these sites, it is really important that they continue to be managed as meadows, and as well as they can be, with the support of the local community as much as possible. The 'green lungs' for wildlife that they provide in an expanding urban environment, the wider services of flood and carbon storage, their ability to store sediment and process nutrients, their support for pollinators, the historic links with our rural past and the simple fact that they are beautiful in their own right and enjoyed by many local people, mean they will only become more important in the future. So to all those who manage and enjoy urban meadows, our thanks are extended to you and we encourage you to be heartened about the future...for the future is surely only going to be more urban meadows.

Our thanks are extended to Heather Ball, Ian Elphick, Mick Phythian, Judy Webb and Samantha Lyme for their invaluable contributions to this article. Where indicated, follow the hyperlinks to find out more about their work and sites.

