



Welcome to our Autumn 2019 newsletter.

There is so much going on in the world it is hard to know where to start. In this edition, we are covering global issues (food origins and climate change), national issues through policy work and our new Advocacy officer, conservation of wet grasslands in Scotland, and a discussion about the Red List. All that, plus updates from our Ambassadors, as we start Phase 3 of the programme.

Firstly, welcome to Olivia Nelson, who has been appointed to our very first new post since the Partnership began.

I'm delighted to have been appointed by the Floodplain Meadows Partnership as the new Advocacy Officer as it's given me the opportunity to continue to advocate for the natural and historic environment, which I love. It's such a lovely dynamic project, which although primarily focused on a habitat, takes in a swathe of vital issues



- catchment management, climate change mitigation,

biodiversity and cultural heritage to name a few. I've worked in the conservation sector for nearly 20 years, mostly with the National Trust, where I was a Senior External Affairs Officer before becoming a Project Manager with a focus on Runnymede (a floodplain meadow with a rather famous story attached to it!). A year working on advocacy at the Organic Research Centre brought me back into the policy world with the hugely contentious issue of what happens to farming and the countryside over the next decade. Brexit, the climate-change emergency, the crisis of biodiversity loss and the impact of austerity provides, as the old Chinese proverb says, interesting times for an advocacy officer. It's within this context that I will work on developing and delivering an advocacy action plan to raise awareness of the role floodplain meadows can play in such issues as ecosystem services and health and wellbeing, and how these





Agriculture, achieving net-zero emissions inquiry launched



31 July 2019

The Environment, Food and Rural Affairs Committee inquiry examines how agriculture can achieve net-zero emissions by 2050 whilst maintaining food production. It will also look at how those affected in farming communities can be supported through the transition fairly.

- Inquiry: Agriculture, achieving net-zero emissions
- Environment, Food and Rural Affairs Committee

Reaching 'net-zero' greenhouse gas (GHG) emissions

A key aim over the next three years will be to ensure there are external policies that benefit and support management and restoration of floodplain habitats. In particular, I have been tasked with wading into the debate and policy development around the draft Agriculture Bill including the creation of new subsidies for farmers and land managers, known currently as the Environmental Land Management Scheme. We will be looking to influence how the scheme can provide positive financial support for landowners wanting to manage, restore and create species-rich grasslands in floodplains. Alongside this we will be looking to raise the profile of floodplain meadows within other relevant issues such as the development and delivery of the Government's Environment Bill (including the establishment of the new Nature Recovery Network), and work by the Environment Agency and others on catchment management. The Partnership recently submitted a response to the Environment Agency Draft National Flood and Coastal Erosion Risk Management Strategy for England, and we await an updated version of this in the new year.

Along with direct contact with Defra we will also be looking to liaise with significant coalition organisations such as Wildlife and Countryside Link, Greener UK and Sustain to share the FMP key messages and guiding principles. I am keen for the Partnership to up the ante on the role it can play in these agendas – either by providing useful case studies, site visits, arguments, key messages, management advice or the scientific data the Partnership holds on the research it has done and is doing on meadows. The recent publication on Natural Capital is a great resource for briefing material, as is the Handbook, and I will be using both to inform stakeholders and consultations. Over the next few months my key objectives will include:

- developing relationships with significant stakeholders and members of the steering group around external policy matters,
- exploring the potential for a Parliamentary POST note on floodplain meadows in order to raise profile with parliamentary bodies
- Responding to external consultations such as the DEFRA inquiry into net zero agriculture
- Attending conferences for information and networking purposes including the Natural Capital conference in October and the Real Oxford Farming Conference
- Keeping a watching brief on the continual Brexit debate including next steps with the Agricultural Bill through the parliamentary process

If anyone would like to work with us on these responses or issues and principles, please do get in touch at olivia.nelson@open.ac.uk

Agriculture Bill 2017-19

Type of Bill: Government Bill
 Sponsor: Michael Gove, Environment, Food & Rural Affairs

Progress of the Bill

Bill started in the House of Commons

House of Commons: 1 (First reading), 2 (Second reading), C (Committee stage), R (Report stage), 3 (Third reading)

House of Lords: 1 (First reading), 2 (Second reading), C (Committee stage), R (Report stage), 3 (Third reading)

Consideration of amendments

Royal Assent

Last events: C Committee Debates: [compilation pdf of sittings so](#)

Next event: R Report stage: House of Commons | Date to be

POSTNOTE Number 396 December 2011

Natural Flood Management



Overview

- The Flood and Water Management Act (2010) and Environment Agency Catchment Flood Management Plans promote working with natural processes where possible.
- Natural flood management (NFM) varies in its effectiveness, for example, water storage or flooding land are often more effective than changing land management practices.
- NFM can reduce erosion and benefit water quality, carbon storage & biodiversity. These positive effects may sometimes be more

Natural flood management, defined here as the

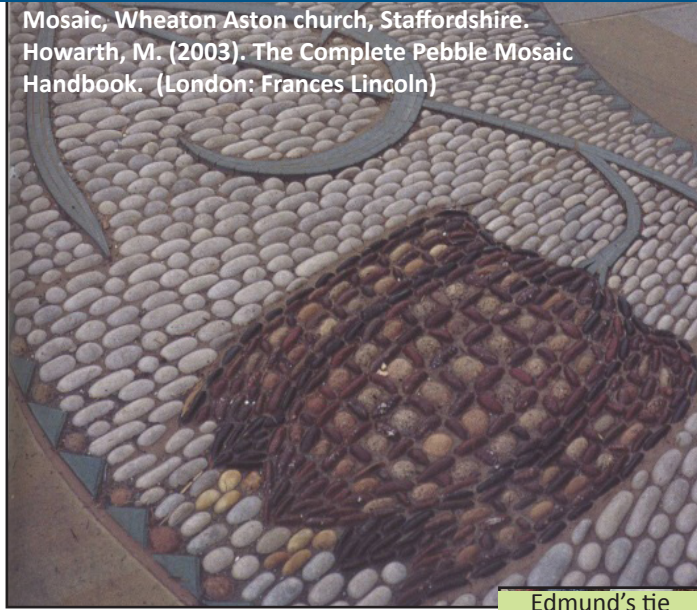


Snake's-head fritillary- how relevant is being native?

The suspension of *Fritillaria meleagris*, snake's-head fritillary, from the Vascular Plant Red Data List for Great Britain, and its transfer to a 'parking list', occurred earlier this year (BSBI News 141, April 2019.) This was in response to its status as a native (i.e. a species that arrived in the UK without human agency) or an archeophyte (a species introduced by humans before 1500 AD) being questioned. Its transfer to the parking list means its status will be reconsidered by the JNCC.

This move is based partly on a PhD study undertaken by Peter Day, which was published in 2017, and partly by a paper by David Pearman which appeared in the New Journal of Botany in 2013. Neither author found any mention in the literature of *F. meleagris* being present in England before 1500. Peter found it was first described in Europe (France) in 1568 and in England in 1596. However, it is important to bear in mind that absence of evidence is not evidence of absence!

Mosaic, Wheaton Aston church, Staffordshire. Howarth, M. (2003). The Complete Pebble Mosaic Handbook. (London: Frances Lincoln)



Edmund's tie (Ducklington Mead Farmer)



Peter Day's work on the species' DNA suggests that the English populations of *F. meleagris* are 'almost certainly derived from populations originally occurring in Northern Europe and likely introduced into England through multiple introductions.' It may well be the case that it entered Britain on more than one occasion, but DNA analysis is not able to determine when such movements occurred, nor whether human agency was involved. In our view, the answer to the questions of how and when snake's-head fritillary arrived in the UK is that we simply do not know.

The Red List Group are therefore being cautious in identifying that this species might have arrived post 1500 and therefore it may qualify as a neophyte. There is no firm scientific evidence that it was not present in Britain before this date.

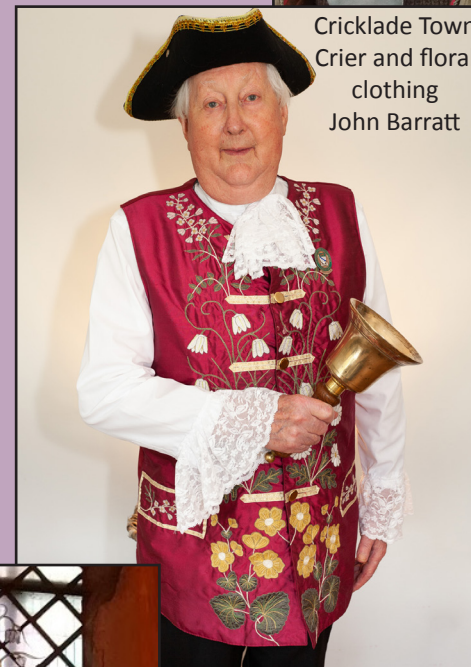
Cricklade Jubilee plate, John Barratt



Regardless of its status on the Red List, snake's-head fritillary is an iconic species that is indicative of a valuable, species-rich and rare habitat, with particular value to early flying pollinators like bumblebees. Several SSSI citations include this species, and likewise some National Nature Reserves rightly celebrate it. It is hugely popular, attracting 5,000 visitors each April to see the display at North Meadow NNR. Cultural associations have sprung up in areas where it is found, and it is celebrated locally with festivals, art work and local names.

The wider question is how we formally record the value of alleged neophytes such as *F. meleagris* – because many other British species

Mothers Union Banner, Ducklington Church Stained glass windows, Ducklington Church



Cricklade Town Crier and floral clothing John Barratt



High Bailiffs chain of office, Cricklade Court Leet John Barratt





are in the same position; there is neither palaeological nor historical evidence for them being present on these islands before 1500, even though they may have actually been here since the last ice age, and may have made many positive contributions to our landscape, flora and culture.

Given that much of the current British flora migrated to these islands from continental Europe in the last 10,000 years, making distinctions between groups of species depending on exactly when they arrived feels a little parochial, especially in the context of climate change. Now more than ever, we should be appreciating the need for our species pool to grow and to respond to changing environmental conditions. Of course, not everything can be on a list of conservation concern, and the Red List Group have to work within the confines of the guidance laid down by IUCN, but perhaps there should be a further list to confer conservation value to iconic and culturally important species, irrespective of their origin.

Snake's-head fritillary is strongly associated with semi-natural, traditionally managed and ancient (e.g. 1000-year-old) meadows, and therefore will hopefully remain an important and valuable part of our flora. The strong public interest in this plant endures, both as a species found in the wild and as an attractive plant to grow in gardens, and so whatever its status, this iconic plant remains a sound indicator species and a beautiful addition to these islands.



Fritillary tableware Cricklade Town Council. John Barratt



Diamond Jubilee mosaic, Cricklade. John Barratt

Grassland plants of the British and Irish lowlands

ecology, threats and management

Peter Stroh, Kevin Walker, Stuart Smith, Richard Jefferson, Clare Pinches & Tim Blackstock



Grasland plants of the British and Irish lowlands ecology, threats and management. Stroh, P.A., Walker, K.J., Smith, S.L.N., Jefferson, R.G., Pinches, C. & Blackstock, T.H. Published by the Botanical Society of Britain & Ireland. This excellent book will be published in October 2019. We contributed towards the publication costs for this book and it contains several accounts of floodplain grassland plants such as snake's-head fritillary and narrow-leaved water dropwort.



Knepp Castle Estate – Re-wilding vs species-rich grasslands.

In May 2019, we visited Knepp Castle Estate to find out more about the Knepp Wildland project. We have been aware of the increasingly popular re-wilding debates and wanted to see at first hand how it was working at Knepp, and what the relationships were between re-wilding concepts and species rich grasslands. We had a wildlife safari with Charlie Burrell and sampled some 'wild range' meat. It is an impressive site, and much has been written about it elsewhere (e.g. <https://www.theguardian.com/books/2018/jun/28/wilding-isabella-tree-review-farm-return-nature> <https://www.britishwildlife.com/article/volume-27-number-5-page-333-339> and <https://www.theguardian.com/environment/2018/jun/15/the-magical-wilderness-farm-raising-cows-among-the-weeds-at-knepp>). It really was noticeable how much wildlife there was on the estate, following cessation of intensive agriculture.



Species rich meadows, associated with more traditional agricultural practices, are perhaps not a priority in such a system, as they require regular interventions and cannot easily be generated and maintained by freely roaming animals: the model is not based on the need to conserve grass for winter feed. However, re-wilders should not rule out the concepts of, and potential for, species-rich agricultural grasslands, and some grasslands could fit well in such a system; calcareous grasslands are perhaps easier to cater for as part of a landscape/habitat mosaic with free-ranging herbivores for example.

Species-rich grasslands add hugely to biodiversity and should perhaps be seen as a step between more conventional agriculture and a "wilder" system. Part of the restoration of our countryside and its biodiversity needs to include these systems, as a way to produce food more sustainably whilst providing numerous other benefits. If you are of the view that our land should be shared (agriculture and wildlife coexisting) as opposed to spared (agriculture restricted to some areas and wildlife to others,) then species-rich grasslands should have a place in the countryside. At the very least we would hope to see species-rich grasslands maintained and extended, rather than being abandoned.

We attended a CIEEM Grassland Restoration conference this June in Chesterfield. This was a really excellent opportunity to discuss current evidence and management/restoration issues across the sector.



We have been working with a number of National Trust staff and sites and are going to talk at their Regional Ecologists annual meeting this year. We know that they are keen to develop floodplain meadow restoration activities across a number of their properties, and we are keen to help them achieve this. Sites we have visited so far include Shugborough, Charlecote, Attingham and Packwood House.



FMP Ambassadors Updates

Our Phase 1 and Phase 2 Ambassadors are pretty much through the training now and are starting to run their own courses and events locally. Phase 3 Ambassadors, who had their first residential training course in May this year, have also been very busy setting up their site monitoring and even running meadow events at the same time! This is a round-up of some of what they have been up to.

National (Floodplain) Meadows Day

Quite a few of our Ambassadors organised events for National Meadows Day including **Helena Darragh (Northants Wildlife Trust)** who ran a weekend scything workshop (along with a butterfly photo safari and wildflower walk) in July. This took place at Helena's study site, Ditchford Meadow. Sixteen people were trained to scythe, the workshop was a great success and Ditchford got a small trim in the traditional way. Scythers were a mix of farmers, land managers and conservation volunteers, many of whom intend to scythe their own grassland sites. They are planning a reunion and more workshops next year.

Ann Cantrell (new Staffordshire Ambassador) had

an open day as part of the White Peak Farmer Facilitation Group at a truly spectacular 60 acre grassland SSSI. Public access is not normally permitted, but the farmer opened it up for the day. Ann also ran a guided walk in the South West peak through two beautiful hay meadows.

Sarah Robinson (new Lancashire Ambassador), ran an open day at Bell Sykes Meadow, part of the Forest of Bowland AONB, which had +150 people attending and included bumblebee identification walks, meadow walks, a tramper (4WD mobility scooter) available, the local beekeepers and their observation hive, a local wood carver, cobbler (cobbling the yard, not making shoes), a willow sculptor, meadow-plant infusions, tea and cake!

Also scything and hay making demos and lots of info and time talking to folk wanting to diversify their meadows. The day was also the launch of meadow gin - a specialist gin infused with meadow plants, including some from a lovely floodplain meadow, produced by Goosnargh Gin <https://goosnarghgin.co.uk/our-story>

David Gowing explains soils and hydrology to Ambassadors Phase 3. May 2019



National Meadows Day, Northants. Scything weekend.





Gloucestershire Ambassadors and the Severn Vale Guardians

Our Gloucestershire Ambassadors have been joining forces with landowners, ourselves and others to learn more about remaining meadows in the Severn Vale area, and to see whether we can work on a wider project to highlight the importance of this rather large extent of meadow. A workshop was run by FWAG (**Sarah Wells - new Gloucestershire Ambassador**) and others to talk to the Severn Guardians Facilitation Group about the meadows in the Severn Vale, with two follow up events this year already. One of the key partners in this project is the Severn Curlew Project <http://www.glosnats.org/the-gns-curlew-meadows-project/>. Both Sarah, and **Ali Wouters, (second new Ambassador for Gloucestershire)**, are also studying two sites within the Severn Vale area. We have visited a number of sites over two days with partners including Natural England, farmers, the Curlew Project, local botanists, FWAG and others to see what the meadows are like. There are really rather a lot and they are really rather nice. There are more MG4 meadows here to add to our inventory. Sarah is also helping to manage the Upper Thames Farmer Facilitation Group, another area of great relevance to floodplain meadows. As well as being part of the activities above, our third, and longest serving **Gloucestershire Ambassador, Ali Swanson (Natural England)** has been busy co-ordinating a range of partners so we can consider securing funds to develop an area wide project.

Worcestershire Meadows, Forest of Feckenham and Avon Meadows Pershore (Worcestershire Ambassador Ken Pomfret)

Ken Pomfret (Worcestershire Ambassador) and his team have been busy working with Wychavon District Council (WDC) through Liz Etheridge. WDC manage the Avon Meadows under Higher Tier Stewardship and are working to restore plant diversity on the 11 ha of typical, unimproved floodplain grassland. Weekly monitoring of a network of 10 dipwells installed by Ken some 5 years ago has identified those areas hydrologically suited to enhancement. Ken has also been recording P changes year on year and these are shown in the table below. The relatively high levels have been identified as one of the key limiting factors for establishing a species-rich plant community at the meadows by Ken's Ambassador study.

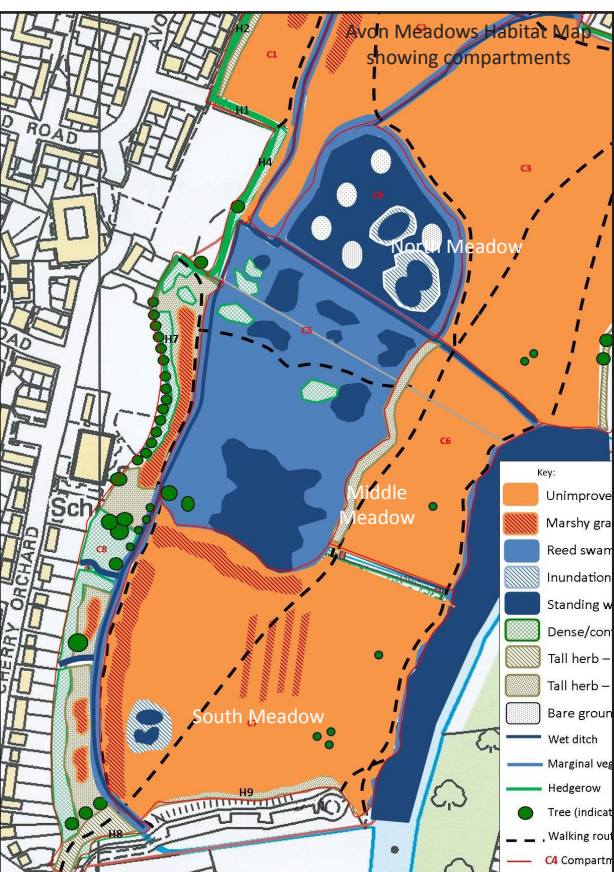




Location	2015				2017				2018			
	pH	Olsen P	Cut date	Yield (T)	pH	Olsen P	Cut date	Yield (T)	pH	Olsen P	Cut date	Yield (T)
South Meadow	6.6	36.8	29th June	40	6.7	34.8	3rd July	38	6.5	27	25th June	60
Middle Meadow	7.2	45.3			7.2	37.6			7.4	30		
North Meadow	6.2	26.3			6.3	21.2			7.1	21		

In order to reduce the soil-nutrient level, a hay cut has been taken in each of the last few years in late June/early July. Yield from the approximately 11 ha has been between 40 and 80 tons. This cutting regime has resulted in a significant reduction in phosphorus on South and Middle Meadow. North Meadow already had relatively lower levels and these have remained fairly constant. Fortunately there has been no significant flood deposit since 2012. In the last couple of years, hay cut dates have been dictated by timing of green hay availability on donor sites. Aftermath grazing with sheep for the past few years has created a well cropped sward. Cattle would have been preferred but one previous experiment led to very adverse reaction from dog-walkers and other locals using the meadows. In 2014 and 2015, 250+ sheep came on in early November and remained until mid-December. Since then the number of sheep have been reduced (approx. 150) but they are on the meadows from mid-October until mid-December.

The restoration process was started in the summer of 2017, with green hay collected from a nearby SSSI (Lazy Meadow), spread on a lightly harrowed ¼ ha of Middle Meadow and supplemented with 20 kgs of seed-mix taken from Clattinger Farm and North Meadow in Wiltshire. By the following summer there were already positive signs and by this year the annual botanical monitoring has shown the area to have progressed from MG9 to a solid MG4. As a result of these encouraging signs, 2 ha each in both South and North Meadows were similarly treated in 2018, again with marked improvement in wildflower diversity being seen just one year later.

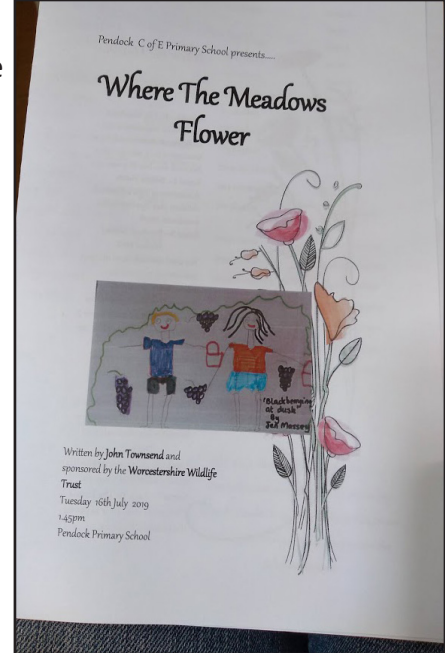


This restoration project is clearly going well and should continue to show improvements to diversity under the current management arrangements. It should serve to demonstrate that sites don't need to be written off because of high P levels, and that thoughtful management and commitment can bring significant changes; particularly as Ken believes if the hydrology is right.

Elsewhere in Worcestershire meadows enthusiasts have been busy this year. The Wildlife Trust have facilitated the establishment of the Forest of Feckenham Meadows Group, trying to build a network of meadow owners in the south of the county to help link people for mutual benefit. Green hay exchanges, machinery sharing and knowledge transfer are hoped to be some of the outcomes. Linked to

this initiative, those of us who are interested in floodplain meadows specifically have started to talk about whether we can develop a project to restore the habitat along the Avon and Severn. This is only in discussion stage at the moment, but if you are in the area and not linked to this group and would like to be...please let us know.

In a further related link, the Worcestershire Wildlife Trust have also been delivering their HLF project at Hardwick Green Meadows <http://www.worcswildlifetrust.co.uk/reserves/hardwick-green>. This involved purchase of the site, and a range of associated projects, including oral histories and archive research. One of the outputs so far has been a play performed by the Pendock Primary School, and written by John Townsend, based on the oral histories that had been gathered by volunteers. The play was excellent. More here <http://www.worcswildlifetrust.co.uk/blog/hardwickgreenmeadows/2019/07/24/lights-camera-action>



School play performed by Pendock Primary School, as part of the Hardwick Green HLF project.



Great Bottom. Claire Cornish's meadow site in Cumbria. Best name for an Ambassador study site?

Charlie Long (new Worcestershire/ Herefordshire Ambassador) is also carrying out her study at Hardwick Green Meadows.

Rachel Remnant (Hampshire) has been busy trialling management techniques at Winnall Moors, including looking at how to control *Phalaris arundinacea* reed canary grass invasion through cutting. [There is a case study about this work on our website.](#)

Jim Horsfall (South Yorks Ambassador), ran a floodplain meadow training day from his site and a guided walk for National Meadows Day.

Floodplain Meadow athletes

Floodplain Meadows Partnership Director wins a rowing Gold Medal at the World Masters Regatta, and North Meadow NNR Reserves Manager takes part in World Transplant Games.

David Gowing represented his rowing club, Bedford-Star in an VIII at the World Masters Regatta on Lake Velence near Budapest this September, and came home with a gold medal. His Bedford-Star team was the second most successful club at the games, beaten only by Moscow! An incredible achievement.

Aidan Fallon, North Meadow NNR Manager, had a heart transplant 5 years ago and was able to compete for Team GB's Transplant Cycling Team this year. This was his first time competing for team GB and the games are the biggest international organ donation awareness event, highlighting the need for organ donation and the full healthy lives recipients go on to lead. Every athlete competing is honouring the memory of their donor, and this year was extra special for Aidan as he had the opportunity to meet the parents of the young man (Nick) who donated his heart after he passed away.

Aidan scored top points across all heart transplant competitors and was the fastest member of the GB team in his group. He would really like to use this opportunity to ask people to take a moment to consider joining the organ donor register. The law is changing soon, but in the meantime there are still people who die every day. Nick didn't just save Aidan's life, he saved five! Now there's a legacy to be proud of.



Phil Heron Photography



Species-rich wet grasslands in Scotland - 2019 update

This January we were fortunate to secure some funding to develop our work in Scotland. In 2018, we had visited the Outer Hebrides with Scottish Natural Heritage and identified that there were grasslands of great interest that were not designated. These were grasslands situated at the back of machair systems, probably in hydrological continuation with them. We found quite extensive areas around North and South Uist. A report of our findings can be found in this paper, published in Hebridean Naturalist 2018, and our trip was also summarised in our Autumn 2018 newsletter here.

One of the starting objectives for this work was to include Scottish grassland data in our review of the Calthion which focussed on English and Welsh grasslands only, published in 2014. Therefore we were keen to collect quadrat data from a wider selection of similar areas in Scotland.

The funding, from the Scottish Higher Education Innovation Fund, enabled us to follow up last year's surveys by looking more widely at the Scottish coastal systems and islands, partly based on historic meadow surveys, and partly based on assessment of existing NVC data. We were also able to install data loggers and describe hydrological transects in two of the best sites, in order that we might compare the hydrological function of the systems with those we are already very familiar with in England.

As a result of 2019 activity, we have now visited Coll and Tiree (Inner Hebrides), several sites along the North Coast of the Scottish Mainland, the Orkneys and Shetland. We have installed data loggers and described transects at a site on South Uist, and a site on Shetland. We will be writing up our findings in a report before Christmas. We were luckily able to share the botanical survey work between two botanists: Ian Strachan and Sarah Lambert.

The main issues appear to be abandonment and lack of drainage. It is very wet in most of these areas, and production of hay can be tricky without ongoing maintenance of drainage infrastructure. The sites have a long history of hay making, through crofting and, as for floodplain meadows in England and Wales, there are culturally significant aspects of the meadows as well as their wildlife conservation value.



Aith Meadows on the Shetland Islands. Still cut carefully but very wet as drainage infrastructure has not been maintained.

An extensive area of damp MG8-type grassland inland of extensive sand dunes on the Isle of Coll, managed by autumn and winter cattle-grazing, which produces considerable poaching.





Meat - a balanced diet?

The current debate around climate change and choice of diets has largely focussed on the positive impacts of veganism and vegetarianism, and the negative impacts of meat production and consumption, particularly red meat. However, the reality is more nuanced. If we continue to follow this simplistic argument, at least in the UK, we run the risk of throwing the baby out with the bathwater.

A plethora of articles, papers and reports have looked at the impacts of land use on climate change, including from the IPPC (Climate Change and Land August 2018). Some assessments just look at the carbon impact, whilst others look at the wider positive impacts from grazing animals as well. The way in which animals are farmed and managed appears to be critical to their climate change impact, particularly when the positive elements of livestock farming are considered.

Floodplain meadows, as with all grassland systems, have arisen as a result of livestock production over thousands of years. They facilitate year-round grass-fed animal production, as they provide nutritious hay which can be fed to animals over winter, bringing wider health and animal-welfare benefits. One result of this long association between grasslands and animals is very species-rich swards, brilliant for biodiversity, offering a healthier mix of vitamins and minerals for livestock and a healthier source of omega-3 and omega-6 fatty acids for people. They also offer a 'happy animal' approach as opposed to the intensive farming production systems where animals are housed indoors.

At the same time, species-rich floodplain meadows facilitate the storage of carbon, the filtration and storage of water, the uptake of nutrients, and the creation of beautiful landscapes and healthy ecosystems, requiring no artificial inputs. So whilst they are based around animal agriculture, and therefore have a methane output, this is significantly less than intensive systems and is strongly associated with a wide range of positive ecosystem services. Grazed systems can make positive contributions to the greenhouse gas balance through carbon storage in their soils and methane oxidation in their root zones.

One of the hard questions that is going to be asked of us is what sort of a landscape do we want? We have already witnessed/caused rapid landscape changes in the UK over a very short time period, and we have just a few cultural landscapes left, with habitats that have developed slowly alongside humans. It would be folly to abandon these areas now and risk releasing the carbon stores they hold in their soils because of a campaign for reduced meat production. Supporting farmers who are genuinely delivering a range of public goods and who care deeply about their animals and the environment must be part of the solution. If you buy locally farmed meat from grass fed farms, and even better from wildflower-rich sites, you will be supporting a sustainable system of food



These cows eat hay from this meadow, and aftermath graze it as well.



Meat from semi-natural grasslands is a tiny fraction of the total red meat produced in the UK (let alone globally), so reduction of these grazing animals is negligible in its impact to the carbon budget of the country, yet massively damaging to the impact on biodiversity, and all the other ecosystem services that grasslands like these can deliver.

 James Rebanks
@herdyshepherd1

Thanks @Cambridge_Uni for banning my grass-fed beef - how about addressing the primary causes of climate change, divesting your investment portfolio of fossil fuel burning activities, & changing your 17,000 hectares of fairly sterile arable land?
These are my fields
Show me yours



Tweet revealing the frustration about the concept of removing red meat from restaurants/cafes (in this case, Cambridge University) and the hypocrisy that this reveals. Grass fed beef bring lots of benefits.

production which works in harmony with natural cycles. Such systems should be seen as a nature-based climate solution where grazing is crucial to achieving the many benefits that species rich grasslands can bring.

There needs to be a more multi-dimensional debate on the advisory messages given out in the media. Often only selected elements of a story are presented. As a strongly science-based group we share concerns about the carbon footprint of current (particularly intensively produced) meat-production methods, yet we advocate the use of extensive grazing as a positive land-management tool to generate healthy grass-fed animals entering our food chain. There is room for more of the 'good' red meat production from these grasslands, that delivers multiple benefits, which will inevitably be replacing more impactful and intensive systems. Our advice would be to review the amount and type of meat you eat and to buy locally and from known producers wherever possible.

Follow-up links: <https://www.ipcc.ch/report/srccl/>, <https://sustainablefoodtrust.org/>
<https://www.eating-better.org/betterbyhalf#1-3>,
<https://theecologist.org/2019/aug/21/whats-our-beef-beef>
<https://www.theguardian.com/commentisfree/2018/aug/25/veganism-intensively-farmed-meat-dairy-soya-maize>
<https://www.pastureforlife.org/research/pasture-for-life-a-solution-to-global-warming/>

Still unknown resources on your doorstep?

Earls Barton meadow was brought to the attention of Northants, Beds and Cambs Wildlife Trust by a local farmer when they were asking for potential meadow restoration sites as part of their Farming for the Future project. It was surveyed this summer (2019) to get a baseline prior to drawing up any plans, and the Wildlife Trust were amazed to find a large section of the field was already a species-rich MG4 meadow with abundant great burnet. The field regularly floods in winter but has received rather sporadic management in recent years as it is isolated from the rest of the farm. The adjacent fields are soon to be lost to gravel quarrying, but thankfully this section has been spared.

The species richness is patchy and some of the finer species expected weren't present, but a restoration and management plan has been agreed with the farmer who will return it to an annual hay cut and aftermath grazing regime. Natural England have agreed to add the field to the priority habitat inventory so it can be entered into the farmers' Countryside Stewardship agreement next year.

This is great news, and is not an uncommon story for us to hear. There have been quite a clutch of new small wet meadows identified in South Worcestershire, for example, thanks to the concerted activity of the Local

Wildlife Sites Officer, Michael Liley. We have also visited some really extensive areas of floodplain meadow in the Severn Vale not all previously on our inventory. More about this on page 7.

Many meadows still being unearthed are of SSSI quality! So keep looking, and let us know about any you encounter so we can add them to our list. If you need any advice on management, do please get in touch or speak to your local Ambassador.

