Floodplain Meadows Partnership

Summer 2017 Newsletter

www.floodplainmeadows.org.uk

Welcome to the summer 2017 Floodplain Meadows Partnership newsletter. In this edition we have a European perspective on threats to floodplain meadows and other habitats from John Rodwell (page 2), a report on the crisis in the curlew population (page 5), and an extended feature from two different farmers, looking at how they work with floodplain meadows and how they can survive in the future (page 7). Also, updates on our survey of restoration meadows, a global survey of wetlands to be completed by end September and a new biolological flora for....saw-wort!

The MET office weather summary (http://www.metoffice.gov.uk/climate/uk/summaries/2017/summer) tells us that June was provisionally the fifth warmest June since 1910, showing 1.5°C above long term average in the south, but June was also wetter than average, with overall 155% of average rainfall, and therefore the sixth wettest June since 1910. July was also wetter than average in most areas (overall 137% wetter than average) and August seems to be going the same way. So the summer has been rather warm, wet and dull!

For hay makers however, June did offer a brief but perfect period of hot, dry weather if you were able to take advantage of it. This shows once again, the need for flexibility in hay making dates as the rest of the summer has been pretty poor (however see article on Curlews on page 5).

One of the species of the summer. This year saw a lot of oxeye daisies. Very showy and eyecatching plants. This picture was taken at North Meadow NNR.

European Red List of Habitats

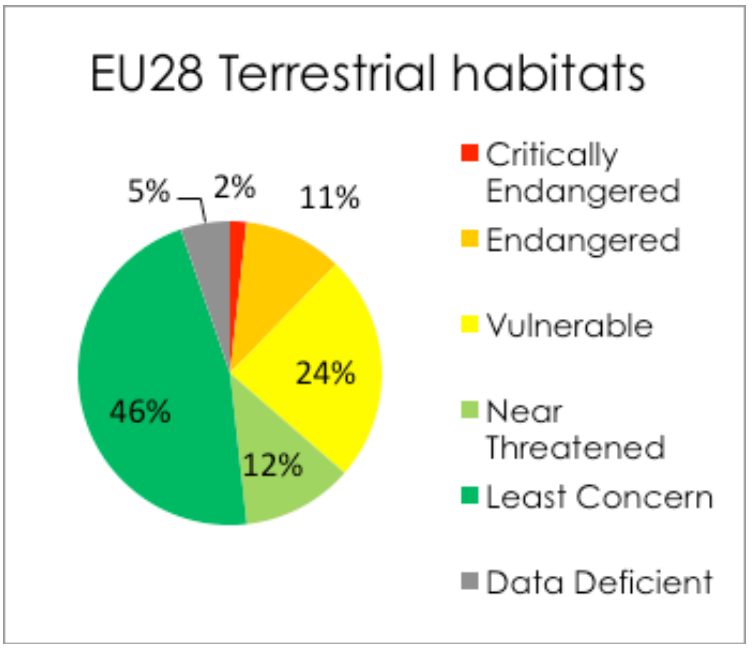
An overview from John Rodwell

The European Red List of Habitats was a €1.5M project funded by the European Commission DG (Environment) to assess changes in extent and quality of all natural and semi-natural terrestrial, freshwater and marine habitats across Europe and in the neighbouring seas. The Red List provides an entirely new and all-embracing tool to review commitments for protecting and restoring the land and seas of Europe. It covers a much wider range of habitats than those legally protected under the Habitats Directive and aims to help meet the targets of the EU2020 Biodiversity Strategy.

Red List habitat E3.4a Moist or wet mesotrophic to eutrophic meadow (© J. Janssen), one of the most Endangered grasslands of Europe, still under threat in the UK.

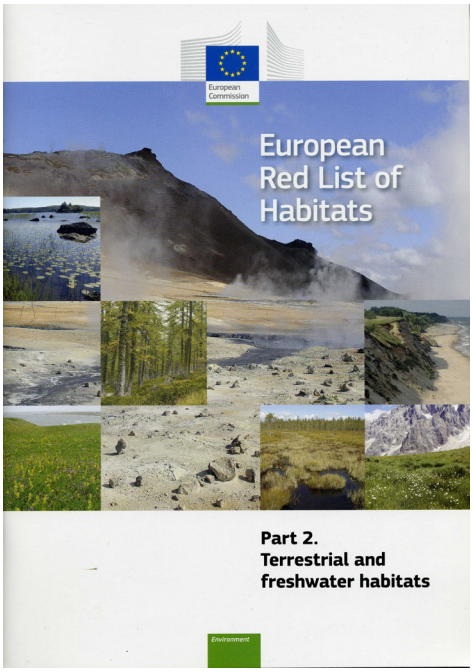
An international consortium of Alterra, including the UK NatureBureau and independent consultants Susan Gubbay and John Rodwell, worked with over 300 experts from the EU28 countries plus Switzerland, Norway, Iceland and the Balkans and in the North Atlantic, Baltic, Mediterranean and Black Seas.

For terrestrial and freshwater habitats, the Red List used a comprehensive Europe-wide modification of the EUNIS classification, providing a total of 228 habitats, of which 95 occur in the UK. John Rodwell coordinated the assessment of terrestrial and freshwater habitats in this country, working with a team of other independent consultants and conservation/ environment agency staff.



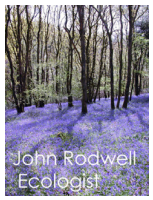
Territorial assessments of changes in extent and quality were combined to yield a single category of threat at two geographical scales, across Europe. Overall, among terrestrial and freshwater habitats, 37% (33% in the EU28+) fall into the top three categories of Critically Endangered, Endangered and Vulnerable. More especially threatened are mires (84%/54%), grasslands (53%/49%), freshwaters (46%/38%) and coastal habitats (45%/43%). Forests, heathlands & scrubs and sparsely vegetated habitats of cliffs, screes, snow and volcanic habitats are less endangered but still often at risk. The UK scores a little more severely than Europe as a whole because, though we have no habitats that are Critically Endangered across Europe, we have a high representation of habitats that are assessed as Vulnerable at a European level – among coastal salt-marsh and sand-dune, valley bog and poor fens, standing waters, springs and watercourses, pastures and meadows and traditionally- cultivated arable land.

The Red List shows that European habitats are declining in extent and quality for many reasons, and that many threats are becoming worse. Intensive farming and abandon-ment of traditional grazing lands, drainage and pollution, invasion of alien plants and animals, urbanisation and associated infrastructure development - all of these continue to pose dangers to terrestrial and freshwater habitats. Some damaging effects of climate change are already clear on land and at sea and are likely to worsen.



All outputs of the Red List are being lodged with the European Environment Agency where they are incorporated into EIONET, accessible through links on the DG(Environment) website: http://ec.europa.eu/environment/nature/knowledge/redlist_en.htm. Outputs comprise (1) two reports, one for terrestrial/freshwater habitats, one for marine, outlining the aims, scope, methodology, results, and applications of the work; (2) pdf modular fact sheets for all 490 habitats (around 5000 pages in total) including, for each, a habitat description, species list, images, crosswalks to other habitat typologies including Annex 1, distribution map, territorial data on extent and quality, list of threats (using Article 17), full threat assessment, list of contributing experts; (3) GIS habitat distribution maps; (4) images showing the habitat and its landscape context; (4) Excel spreadsheets of all territorial data; 5) a PowerPoint presentation outlining the project aims, scope, methodology and results; and (6) publicity flyers and poster. Also in preparation is (7) an Access database containing all the information used for the assessments.

Two further developments of interest are, first, that the EEA and DG(Environment) have agreed that the terrestrial/ freshwater habitat typology used for the Red List will now form the basis of the EUNIS classification, revised sections of which are becoming available on the EEA web-pages. Second, the Red List makes cross reference to the alliances in the phytosociological classification of European vegetation. The latest version of this typology, including communities of cryptogams and algae, has been published in Applied Vegetation Science: http://onlinelibrary.wiley.com/doi/10.1111/avsc.12257/abstract. A revised conspectus of the UK National Vegetation Classification with crosswalks to this framework of alliances and to the Red List EUNIS habitats is now being prepared.



IUCN

naturebureau

ALTERRA WAGENINGEN UR

A new biological flora for saw-wort

A new Biological Flora account for saw-wort (*Serratula tinctoria*) has recently been published in the Journal of Ecology. More information can be found here https://jecologyblog.wordpress.com/2017/08/16/volume-105-issue-5/

All the biological flora can be found through this link, downloadable for free, so if you ever wanted to know more about a specific plant, there is a good chance that someone has done a literature review of it, and it has been published as a Biological Flora. This one was part written by our Steering Group member from Natural England, Richard Jefferson, along with Kevin Walker from BSBI. Well done both!

A new blog from the FMP; lessons from the Rhine Floodplain

This June the FMP went to Germany to see a great selection of floodplain meadow restoration sites.

Find out more in our blog here http://www.floodplainmeadows.org.uk/news/blogs

IN BRIEF

FMP Conference

In May this year, we ran our third conference. We had decided to go North (well, York), as we had not previously hosted a conference there and Yorkshire of course supports a very significant area of floodplain meadow and some very interesting issues. We chose the very wonderful National Railway Museum for the location, for its central position, its fabulous display and its quirky offering. We had 111 delegates, who needed to be fed, shepherded around 3 site visits and entertained. With huge gratitude to those living in the area, who were able to help, we think the conference went very well, and provided an opportunity for delegates to talk, ask questions, share experiences, and have fun.

One of the requirements for delegates was to complete a questionnaire upon registration. This helps to give us an idea of your issues, priorities and help to influence our direction and it is useful to see what your fellow floodplain meadowers think. For example, things that prohibit restoration include: funding, lack of connection to floodplain, need for flexibility with farming, relevance to farming community, long term management, conflicts of interest within government organisations. Delegates' main issues with sites are: dock/weed management (esp in organic system), people/dog pressure, hydrology, lack of time/man power, on-going management, finding a grazier, funding, lack of will to have water on land, lack of contractors for hay cut, water quality, abandonment, conflicts of management objectives.

Overall, 61 (55%) said the FMP should be expanding to include additional habitats, 24 people expressed an interest in a third Ambassadors programme and 42% found the website the most useful tool, with conferences, then site visits after that. This is all very useful and has already fed into our next bid for funding, so thank you very much to those who were able to complete this questionnaire. You can still contribute here http://www3.open.ac.uk/forms/questionnaire2017/ which also gives you an opportunity to let us know if you want a visit to your restoration site, or at least tell us about it. The presentations are now available on our website **here.**

Visits to floodplain meadow restoration sites

This year, we have once again been busy looking at restoration effort in England and Wales. We visited 65 fields between May and July, covering Cumbria, Yorkshire, Lincolnshire, Oxfordshire, Staffordshire, Wiltshire, Shropshire, Northamptonshire and Gloucestershire. We also visited some sites with great potential in Wales, including a possible old Lammas meadow which looks very exciting. It's been a great year for great burnet on these sites, which is interesting, as last year, we visited hardly any restoration sites with great burnet. This year, it seemed to be everywhere.

Global survey of wetland condition

A global wetland survey developed by the Society of Wetland Scientists is taking place. The survey aims to take a citizen science approach, asking those that live, work or otherwise know their local wetlands to report on their condition – you can find the survey and background here: http://www.worldwetnet.org/about-us/world-wetlands-survey-2017. The results will be made available internationally, and used at the next Ramsar conference in 2018. Please do fil this in as it could help shape our wetlands for the future. The deadline is the end of September 2017.


Mike Dodd

Curlews are in Crisis

How viable are the remaining populations of Curlew in southern Britain, and how much of a role do floodplain meadows have to play?

Curlews are in crisis. In Ireland, populations have crashed 97% since the 1980's, and whilst the populations in northern Britain are still strong, the state of populations in the south is less stable, with the Breeding Bird Survey (BTO/JNCC/RSPB) recording declines of 37% between 1995 and 2015. The main populations are now thought to be New Forest, Salisbury Plain, Somerset Levels, Severn and Avon Vales, Upper Thames Breckland and Shropshire with remnant populations like Dartmoor, Exmoor and Herefordshire. These Curlew hotspots are critical to maintaining the current range of the species and for their strong local, cultural connections.

In Ireland and Southern England fragmentation and loss of habitat through changes in land use and farming practices are a major feature in the decline. Predation pressure is thought to be a key factor in breeding success (in Shropshire, no chicks survived from over 30 nests monitored over 2 years and predation was the major cause of failure), and disturbance (by ramblers, joggers, dog-walkers) is also potentially a major factor.


Richard Archer/RSPB

A forum has been established linking groups across the UK and Ireland who are working on Curlew. This has been organising awareness raising workshops in different parts of the UK, and there is a specific southern England Curlew group who are trying to understand more about the state and reasons for decline of remaining populations. Anyone is free to join these groups and there are regular newsletters providing updates on research and monitoring work being undertaken. These newsletters and more information can be accessed at a new website - http://www.curlewcall.org/

Although Curlew use many different habitats across the UK – such as moorland and lowland heath, the populations in the Upper Thames, Somerset Levels and Severn and Avon Vales areas are particularly dependent on floodplain meadows strongholds. Work has been on going this year in all these areas, being carried out by different groups, to try to record curlew breeding success.

Severn and Avon Vales.

The final total for 2017 is likely once again to be just under 40 pairs, at least holding territory. Most of the birds are nesting in huge hay meadows near the river and observations of Curlews have been combined with recording the botany of the nesting fields. In most cases they nest in floristically high quality fields, often in the lower lying sectors where the grass is slightly shorter.

Shropshire

Recorded around 40 pairs of curlew. In 2015 and 2016 no breeding success from close monitoring, mainly due to predation. 2017 saw predator control intervention through electric fencing and lethal fox control. 22 nests were found: 11 failed at egg stage due to crow predation, other predation before the fence was erected (at full clutch stage) or agricultural disturbance. 28 chicks hatched of which between 3 and 8 went onto fledge.

Upper Thames

The Upper Thames supports around 40 pairs of breeding curlew, and this number has been reasonably steady for the last decade. These birds are clustered around floodplain meadows and adjacent pasture. However, recent work to measure breeding success is concluding that not enough young are being raised. Key local challenges include predation, access and agricultural disturbance and hay cutting.

Somerset Levels.

All of our pairs are nesting in unimproved hay meadows – mostly MG8, MG13 or MG9, and conspicuously away from the main north side drove, although some adult Curlew have made occasional use of cut silage fields near the drove in the last fortnight. Predation rate of about 50%.

Herefordshire

10 pairs reported, but little info on nest numbers. Lugg Meadows and Sink Green are the major sites.

This is actually quite tricky as they are hard to see and keep track of, particularly on big meadows with long vegetation. Identifying whether curlews are nesting on a site is best done by looking for curlew displaying and calling in March and early April. You may well not see any birds in May or June, as they often become very elusive whilst nesting. They can however be quite aggressive if you are walking around a nest and may try and dive bomb you.

Inevitably the issue of cutting dates is being discussed

Inevitably the issue of cutting dates is being discussed. We have some advice on our handbook, and the Upham Meadow site is used there and elsewhere as an example of a beneficial cutting regime, where the meadow is divided into strips (as the traditional Lammas meadow system was) and the strips are either cut early, mid or late season, with the cutting time rotated each year. This is thought to offset the impact of rapid hay cuts due to more efficient machinery and leave sufficient tall vegetation later in the season for both fledging Curlews and invertebrates. The gradual cutting regime, and the leaving of cut hay to dry appears to allow larger numbers of invertebrates to survive, a point rarely highlighted in the past; it may be that the combination of (rotating) late cutting and rich invertebrate populations is particularly favourable for the Curlews. This is a sensible approach and could be applied to other sites where there are Curlews nesting. However we do not know how practical this is for farmers, although the Upham site, managed by farmers works well.

However, we would not wish to see a wholesale late cutting date, especially where there are no nesting curlews in a particular year, as we know from our data that regular late cutting (later than beginning July) **WILL** result in a decline in the botanical interest of a site, if it floods regularly and is nutrient rich.

So we must have a balanced and rational approach based on evidence. If you have nesting curlews in your species rich floodplain meadow, then firstly consider yourself very lucky, and secondly please seek advice about what to do regarding cutting. Look at the guidance in the handbook or read our guidelines for when to cut a meadow. We would like to discuss this matter further with anyone working on curlews in lowland floodplain meadows.

The dispersed nature of curlew breeding populations requires landscape scale solutions, not just solutions limited to nature reserves. Curlew conservation goes hand in hand with conservation of other features of the wider landscape, including flower-rich hay meadows, butterflies and other invertebrates.

If you want to join the Curlew Forum, or find out more about Curlews in southern Britain, please contact Mike Smart smartmike143@gmail.com or check the website (http://www.curlewcall.org/). If you have Curlews on your floodplain meadow and are not involved in the forum, then please get in touch with Mike.

Mike Dodd

How do floodplain meadows work for farmers?

We offer two perspectives in this special feature. Firstly Robert and Natalie Rose, Yorkshire (Derwent Ings) offer a graziers perspective followed by Andy Rumming, who helps to farm Waterhay Farm in Wiltshire and is keen to promote his meat to a range of customers based on the grass it is fed.

A view from the Grazier – what future for farming floodplain meadows?

Robert and Natalie Rose, Rosewood Farm, Yorkshire (Derwent Ings).

The Rose family have had a long association with floodplains, beginning in 1925 by taking on the tenancy of 'Ings Farm' on the banks of the River Hull. The farm, like the meadows that had existed there since time immemorial, is now long gone, consumed by the spread of the city of Kingston, but the links with floodplain farming live on. My grandfather relocated the family to the village of Aughton, in the Lower Derwent Valley, around the same time as my maternal grandfather did the same, just up the road in Bubwith. Both families continued to milk Friesians into the new century, but the changing fortunes of dairy farmers saw the end of both herds, and despite (or because of) large families on both sides, neither farm was able to support the next generation.

However, determined not to let our family connection to the land slip away, myself and my brother Paul decided to do what we could to start again and,

in 1996, the Rosewood herd of Dexter cattle was born.

We began with a handful of cows and took grazing wherever we could find it, which meant grazing odd fields here & there on short term lets, taking our fencing with us. Necessity is the mother of invention; we developed a low cost system involving moving the cows periodically to fresh paddocks which kept the cost of electric fencing to a minimum. This made better use of the grass and supplementary feeding wasn't necessary.

In 2013 we were approached by Natural England to graze an area of regenerated heathy-grassland as part of an HLS agreement on a large arable farm. This coincided with us taking on the grazing of Thornton Ellers, consisting of peat based fens and meadows for Natural England that had seen declining grazing with cattle, and we were able to test our grazing methods in some of the most extreme and varied habitats in the valley. The Yorkshire Ings are a wetland of international importance, so the stakes were high.

The ownership of the Ings meadows is split between private farmers, various conservation trusts and Natural England, with many of the latter being leased back to the farms they were purchased from in the early 1990's. At the time this was a beautiful plan - the farmers got a lump sum to invest back into their businesses, but were still able to use the land. From the conservation angle, Natural England and the other bodies were holding the reins and able to dictate how the land was used and protect it. Some farmers grumbled, but on the whole it worked. Everyone breathed a sigh of relief - the Ings were saved.

Unfortunately after 20 odd years, the system began to break down. Many of the farmers are now reaching retirement age, with no successor to the farm. For those that remain, it is simply untenable to use the Ings at all. The market for meat is so squeezed - meat is very out of fashion due to the difficult-to-break public perception that all meat is factory farmed - so only the biggest, best animals get sold, and that's at a price which barely covers the cost of production. Biggest and best animals require the biggest and best feed, and Ings grass is amongst the worst available. It simply isn't worth putting the stock out there, it will hold back growth. The hay isn't worth the diesel to make. In the last five years there has been an exodus of farmers from the meadows; the Ings are once again vulnerable to change, a scenario the designations have no means to address this time.


Rob Rose

Fortunately we were well prepared for this in many ways at Rosewood; the land on the farm is extremely heavy clay with poor drainage and very little gradient. Our cattle are used to grazing wet pastures and are bred small to minimise damage to the soil structure and be very efficient.

We had already developed our nomadic kind of system, utilising whatever land anyone else couldn't or wouldn't and free from reliance on feed, fertiliser, seeds or chemicals.

By 2012 though, we were bursting at the seams and our biggest issue was how to expand having made full use of everything we can get.

Suddenly, after NE got involved, we had the opposite problem. The tracts of land involved were, to us at the time, enormous. We were used to small, civillised paddocks and these were overgrown expanses, all strange shapes and difficult to fence, mostly without a water supply. We had no choice but to attack it though, and what both we and Natural England discovered was that our rolling, constantly moving grazing system very much suited the wildlife and the grass. Within 4 years we'd turned these rough pieces no one would touch into grazing worth having, and there was a boom in bird numbers to go with it, along with new species of wildflower which had never been found there before cropping up.

This has been extremely rewarding. It's incredible to discover, bit by bit, just how much life is out there in the Ings. Every week through the seasons sees a new thing visit, fledge or bloom. As we move through the landscape with the herd, shifting our daily paddocks along, we really get to see all this up close, more so than if we just looked over the gate to check the cattle were still in there, or drove around occasionally on a quad. Creeping over every inch is also the key to grazing efficiently - gradually as we've come to know all the nooks and crannies, we've been able to fence and water and move the cattle around easier. That kind of knowledge isn't replicable on a franchise-like basis, and is part of what makes the Ings unattractive to industrialised farming models. You can't tame the Ings, even if you were to plough and spray it, the floods would come and wash away all our work; it just isn't worth it! **Out here, you have to work with nature or not at all!**

So the farming side of things is working really well. We are producing more and more fat steers as our cows become better and better adapted to conditions with every generation. We become ever more efficient at grazing and the grass is improving with every season. Natural England remain delighted with what we achieve. We sell everything direct and even while price-matching with Tesco, we are perfectly happy with our profit margins as we have no middleman and our costs are about as low as it's possible for them to be. There is something missing though.

Customers!!!

Marketing is our biggest problem.

We devote many, many hours to our social media content. We have read guides, blogs and books with advice on all this kind of thing. We have carefully kept up with website trends and fashions, run surveys of customers and carefully construct blog posts as part of an ongoing intense dialogue with customers and the public. We invite people to the farm, give tours and answer questions. All on top of a day's work on the farm AND in the butchery. We have tried competitions, paid for adverts, roadside signs and just about everything you can think of to advertise. We keep the price low, offer free delivery for convenience, we bag and label carefully with highest quality material, we take note of what people criticise in the ordering process for ourselves and competitors.

None of it has made much difference. We are now the last cattle farmers left grazing the Ings, the other chap left last summer. The stakes are no longer high just for ourselves, but for Natural England and an entire habitat. This is extremely frustrating given how amazingly well everything works in the run up to sales, which creates a bottleneck. We desperately need to fill the gap created and our gains are starting to suffer as we simply can't graze such an area effectively with so few (150!) cows and sheep (80). But, we receive no outside funding so we are forced to only expand as much as sales will allow. Selling to the conventional market is out of the question, our stock value instantly plummets by ⅔ and that's if you can convince someone to take these smaller, older animals at all. Butchers and restaurants want to pay no more than rock bottom wholesale price and even if not, do not take whole carcasses and can drop you without a moment's notice, which is no good for a product four years in the making.

As a result, we believe the single biggest thing which will solve the survival of floodplain meadows is to either find a form of funding which will simply pay graziers to keep the animals, which seems a big ask, or to find a feasible route to market for the produce. Unfortunately, the 'eat less meat' message in the media is extremely well funded and makes a simple sort of sense in the mind of the consumer. Going against it is an uphill battle, both financially and in terms of how to get a complex, nuanced, counterintuitive message across to a public who are generally completely ignorant on food production and only get their knowledge from tweets, memes and films.

At the moment, "The Meat Industry" is only represented by the industrial bodies, which cannot counteract the claims of the animal rights end of things and only want to promote the industrialised produce. We are alone, not only on the Ings but also in the marketplace and media. Our message for graziers following in our footsteps would be to consider this end of things first. The systems and people to teach you how to do them abound, for the moment, livestock exist which are physically capable of making use of these habitats. The most difficult bit is not the physical doing, but how you're going to sell the stuff.

Farming floodplain meadows - it's exciting, it's rewarding, it's physically possible….but how long can it last?

Rob Rose

Farming a floodplain meadow

Andy Rumming, a farmer from Wiltshire, is keen to promote the benefits of the floodplain meadow habitat that forms part of his farmland, in the produce he sells.

Waterhay Farm straddles the river Thames near Cricklade, Wiltshire, and has been in the Rumming family for over 60 years. It's a 70 hectare permanent pasture farm producing beef cattle and is currently home to around 200 cattle, made up of 70 suckler cows, 2 bulls and their progeny. They are completely grass-fed with no bought in feed at all. Richard Rumming (my Uncle) is the full time farmer, and I work part time on the farm after moving to it with my family 5 years ago.

The clue is in the name – about a 1/3rd of the farm floods regularly, and this can be at any time of the year. Within the area that floods, we have one 4 hectare field (the Long Field) which is managed as a traditional hay meadow and currently in Higher Level Stewardship. It's home to snakeshead fritillaries, great burnet and pepper saxifrage in the spring, large clouds of sand martins and damselflies in the summer, and big flocks of widgeon, lapwing and gulls in the winter. From a biodiversity point of view it's an absorbing and interesting place to be. Yes it can be an idyllic, and beautiful, however it is not a nature reserve, it's a functional part of a commercial farm ands provides a range of benefits.

The agricultural benefit of the Long Field is not be under estimated. It is more grassy than some other FPM in the area, and so the grass in the form of hay and autumn grazing makes a valuble contribution. Some years it provides a large amount of hay. The quality of the hay depends on when it is cut and the hay making weather. I've done some analysis of it and its ok - good feed for cows but not so great for growing beef cattle. The one issue is getting the 4 to 5 days needed to make good hay, over the last few years this has been difficult and instead of haymaking in July its been late August.

Another key benefit this species rich area delivers is as the shop window and branding for my direct meat sales to the public. I trade on the fact that the beef has high environmental credentials. I've used the flora of the meadow on my logo and we always visit it on farm walks. The changing seasons and endless plant and wildlife photo opportunities provide a wealth of interesting branding and social media content.

Once a customer has visited the farm they buy more meat and more often. To really cement that connection particularly with customers who haven't yet visited, I am a member of the Pasture Fed Livestock Association which runs an assurance scheme for 100% pasture-fed beef producers. This lets customers scan a code on the meat pack with their phone and get a wealth of information on the animal, farmer and biodiversity associated with that meat. But as well as prime meat, I am trying to make the meadow link to offal, leather, and every animal product that has a link with the meadow. Floodplain meadows have the ingredients for a strong brand.

In the future I really want the direct sales to grow, and along with this, the area of our floodplain that is managed as traditional hay meadows. I am also keen to get into "meadow tourism" allowing paying guests to have a high quality holiday experience where the meadow is a key part. Imagine watching flocks of waders and ducks from a snug cabin in the winter and wildflowers in the summer from an outdoor wood fired hot tub? (fuelled by pollared farm willow obviously) I am looking at high quality low volume offers that are sympathetic to the meadow.

Andy Rumming

I'm also watching the evolution of a English agricultural policy and agri environment schemes with interest. It is not yet clear if significant money will come through to lowland non-SSSI sites post Brexit. For this 4 ha field, our current government / EU direct support is worth £329/ha/year (HLS £180, BPS £149), and so is significant. Cattle are vital to floodplain meadows and given that over 95% of suckler herds in the country make a loss before government support, government policy is central to conserving and restoring flood plain meadows.

So I think the key is to treat it like any other business asset and make it work. This may sound harsh but I firmly believe that finding the right markets for all the products floodplain meadows produce is essential for their survival. And the more value you can leverage out of the private sector the less dependence you need on government and the whims of rotating ministers.