

Meadows News

Registered Charity No. 1192542

Issue 38 - Spring 2023

Conserving and Restoring Wildflower-rich Grasslands in Monmouthshire

In This Issue

From the Chair 1
MMG News2
The Ponds at Wet Meadow 4
Jacinth & Jemima's New Home 5
2023 AGM/Spring Social 5
Meadow Surveys 6
Trevor Evans 6
Ten Years On: Our 2013 Aims 7
eDNA Survey of Grassland Fungi . 8
Are Hay Fires a Hazard? 12
New Members 10
16 Years Managing a Meadow 11
Members' Meadows/Green Hay 13
The Plant Atlas 2020 14
News from Around 14
Dates for your Diary 16

Contact Us

MMG Chair: Rachel Morgan
For information about the group
or to join MMG contact our
membership secretary Marilyn
Dunkelman marilyn@
monmouthshiremeadows.org.uk
tel. 01600 860031, or use our
online membership form

Contributions to the newsletter or items for the web site can be sent to Marilyn

Other contact details as well as news and events, and information about our meadow reserves at Kingcoed, Maryland and Trellech, are on our web site www.monmouthshiremeadows.org.uk







From the Chair

Happy 20th Anniversary!! Monmouthshire Meadows Group was born on 29th January 2003, when a group of local landowners organised a meeting at The Babington Centre in Trellech to express their concerns about the loss of old species-rich meadows and pastures in the Wye Valley. They were following the example of The Parish Grasslands Project, established in 2002 by Peter Chard and George Peterken across the border in Gloucestershire. The Committee at the time was chaired by Diana Bevan, with Maggie Biss as secretary, Bill Howard as treasurer, and a committee comprising Steph Poulter, Steph Tyler, Caroline Howards, Jill Featherstone, June Holmes, Steve Davies and Adrian Wood. The two Stephs are still on our committee today, and many of the other original founders are still active supporters of the group.

The Group has grown and changed over the years. Initially, meadows were very little in the public eye. Explaining to the general public what species-rich grassland was, and why it was important, meant starting from the very basics. As the years have passed, more people have become aware of the importance of grassland and the biodiversity it supports. It has featured on mainstream TV programmes with Monty Don and the Springwatch team, and most recently David Attenborough's Wild Isles; other meadows groups have sprung up around the nation, and thanks to national charities like Plantlife, grassland conservation is now very much on the



Our ponies, Jemima and Jacinth, now moving on to a permanent home with Gwent Wildlife Trust. Photo from our Anniversary Calendar, original picture by Lindsay Tyler

agenda of conservation and environmental groups. We like to think we did our bit in reaching this stage.

Ten years ago, we produced an anniversary book (which we still give to members when they join). At the time we had 'well over 100 members'. Now we have around 300 members and we continue to grow. With a larger membership, the nature of the Group has inevitably changed and it is harder to keep up personally with everyone and how their land is progressing. We have more responsibilities as we now own two of our own reserves, and help to manage a third.

But looking back at the list of 'Our Aims for the Next Ten Years' at the back of our 2003 book (page 7), I think we can say we have achieved all of them, more or less, and we continue to help our members in practical ways while spreading the word about the importance of grassland conservation. For a committee of volunteers this is an achievement to be proud of, but we couldn't do it without the support and commitment of our community of like-minded meadow enthusiasts. Thank you everyone — and here's to the next ten, or twenty, years!

Rachel Morgan

MMG News

Our 20th Anniversary Celebrations

Members should by now have received their calendar which we put together by our secretary, Pam Manfield, as a thank you for all the support that's been given to us over the years. We really do appreciate it, and thank you to Pam for all the work put into it.



We will be celebrating too with a Meadow Party this summer. We are still finalising details but all our members and supporters will be invited.

Our Exmoor Ponies, Off to Pastures New

Jacinth and Jemima, our Exmoor ponies who have provided such a great service to members over the years, have retired from their peripatetic life style, but they will have a new life as conservation grazers with Gwent Wildlife Trust (page 5). Steph and Alan Poulter, who have cared for the ponies for 18 years, moving them around the county to graze members' land where ever they were needed, can now take a rest. We have been

incredibly lucky to have had this service for so long and we wish all four (Steph, Alan, Jacinth and Jemima) a very happy retirement!

AGM, Talks and Socials

Our social at Llandogo Village Hall last October featured talks from Wendy Tyler-Batt and Pip Morrison. Pip owns the meadows at Crosshands, one of our Open Meadows last June and one of the best species-rich meadows in Monmouthshire. Pip spoke about the geology and history of the landscape as well as demonstrating the results of management as a traditional hay meadow over many years. Wendy and her husband Trevor own a smaller field at their home near The Hendre, where they have created a wildflower meadow more recently. She spoke about how they manage their land. It takes many years to create a

Jacinth and Jemima just after they were offloaded into a pen before going out into the field to graze, watched by Joe Ryder of Gwent Wildlife Trust (picture: Stephanie & Alan Poulter)



meadow like Crosshands, but Wendy showed that smaller successes can be achieved in the short term – something many of our members can relate to.

Our next social is also our AGM, on Thursday 20th April at Cross Ash Village Hall, where we will be talking about meadow invertebrates, followed by a buffet supper. Details are on our web site and page 5.

Open Meadows

Last October, Elsa Wood and Jon Dunkelman (authors of our Grassland Fungi book) led a guided walk through the fungi-rich meadows in Trellech. We were very lucky with both the weather and the fungi that showed up on the day!

This year we are planning one Open Meadow day in Spring in the Raglan/Usk area, with a number of members opening their sites on Sunday 11th June.

Chepstow Walking Festival

On 14th April there is a Meadow themed walk as part of the Chepstow Walking Festival, with a circular route starting at the forest car park near New Grove After a walk around the slopes of Meadows. Cwmcarvan, walkers will be met bγ MMG representatives for a guided walk around New Grove Meadows, and (if time) Wet Meadow. The walk starts at 10am and will take about 3-4 hours to cover 5.6 miles. For more information or to book see this page on the Festival's web site (scroll down). If you can't make the Meadows walk or you would prefer something less strenuous, take a look at the other walks during festival week (11th to 16th April). There is a range of lengths and difficulties to suit most people.

The festival is organised by Chepstow Walkers are Welcome: www.walksinchepstow.co.uk .

Training Courses

This year we will be repeating our popular scything courses with Andrea Gilpin. Scything is by far the most nature-friendly way to cut a meadow, and it's a healthy activity, so while we realise it's not possible for everyone, we encourage people to take up these courses by subsidising the cost to MMG members. If you are interested please get in touch with us.

Look out, also, for details of our plant identification day and other opportunities to improve your skills in our regular email bulletins.



We welcome suggestions too, and information about any courses or workshops that might interest our members.

Out and About

Our stall has already had an outing at the busy Seed Swap event in Monmouth in aid of the Heritage Seeds Library (see item on page 14).

Other events to look out for are Wye July on 9th July in Monmouth, an event organised by Friends of the Lower Wye to highlight the distressing state of our river, and in September we hope to be at the ACE Festival in Monmouth (Action on Climate Emergency) on Saturday 23rd and Sunday 24th September.

If you enjoy chatting to people about meadows (you don't need to be an expert, just enthusiastic) then we are always looking for people to help on our stall at events. Please get in touch if you are interested.

Grassland Fungi: A Field Guide.

Our book is still selling well, helped by some excellent online reviews. It is the only comprehensive field guide dedicated to grassland species. All proceeds go to Monmouthshire Meadows Group, and the authors and additional photographers (Keith



Moseley, Malcolm Schuyl) all gave their time voluntarily. So if you haven't got your copy and want to be able to identify the fungi in your meadows this year, best buy one before we run out of stock! It is available at our events or buy direct from our distributors www.nhbs.com/grassland-fungi-book for £19.99 + p&p.

The Ponds at Wet Meadow

This project has been supported by the Biodiversity Fund of Dwr Cymru (Welsh Water) and the Sustainable Development Fund, a Welsh Government Initiative in the Wye Valley Area of Outstanding Natural Beauty

Finally after many delays with the contractor, work has been completed on restoring the old (upper) pond at the edge of Wet Meadow reserve, and a new (lower) pond created at the southern end of the reserve.

The original pond has been recreated by digging out accumulated mud (leaving it around the edge), and cutting back overhanging trees and scrub around the edge to allow more light in. Branches have been piled up and left in situ near the pond as additional habitat.

Prior to the work being carried out the inflow stream from Loysey/Wet Meadow Wood had been diverted. The restoration included allowing water to flow again into the pond. The restored pond was full this February and a small weir has been installed to prevent the pond outflow washing away the soil.

At the new lower pond, the soil has been levelled around the area and seeded with flower-rich meadow seed from nearby fields.

Before any work commenced the site was surveyed for signs of Great Crested Newts, and







given the go-ahead. Peter Hill of the Amphibian and Reptile Conservation Trust (ARC Trust) in Wales was also contacted and kept in the picture as work was completed.

Future plans will involve monitoring for use of the ponds by toads, frogs and newts and colonisation by aquatic plants. Apart from the meadow seed, plants will be allowed to become established by natural means. Already Floating Sweet-grass *Glyceria fluitans* and Fool's Watercress *Apium nodiflorum* appeared near the outflow of the restored pond.

It is proposed that a pond-dipping platform will be installed in the new lower pond once the ponds have settled in and vegetation has recovered.

The plan was master-minded by our reserve warden, Dick Coates. We are extremely grateful to all our members who supported the work parties, and in particular to the Wye Valley AONB volunteers who have joined us in the physical tasks.







Helpers at the Work Party in November 2022, and (right) the renovated pond (pictures: Dick Coates)

Jacinth and Jemima's New Home

Hi, my name is Joe Ryder I'm the Senior Conservation Grazing Officer for Gwent Wildlife Trust. I'm pleased to announce GWT have taken on Jacinth and Jemima as part of our conservation grazing team. For the spring and summer they will be based at GWT's Wysewood Common reserve. Over the next couple of months they will be moving around the 60 acres of permanent pasture at Wysewood with our rare breed sheep, Long Horn cattle and Hereford steers to make new friends!

Wysewood Common is next to Pentwyn Farm, Penallt (for directions see above link). It's an easy place to come and visit them while enjoying a beautiful walk with views over the Wye Valley.

Towards the end of the summer and early autumn Jacinth and Jemima will be on their travels around the county helping out with grazing some of the smaller grassland reserves throughout Gwent. Both will be checked for health and welfare on a daily basis



New arrivals on GWT's Wysewood Common reserve this week. Jacinth and Jemima (Jacinth pictured to the right)

through our volunteer shepherd group, if you would like to know more or are interested in joining the volunteer shepherding group you can contact me via jryder@gwentwildlife.org

AGM/Spring Social

Our annual Spring Meeting will be at Cross Ash Village Hall on Thursday 20th April. Doors open at 7pm for a 7.30pm start.

The AGM will be brief, followed by two talks from members with a lot of experience in their subjects, all about managing meadows for invertebrates.

Local bee recorder Roger Ruston, who many of you will know from his work around the county and talks at Monmouth Bee Festival, will give a short talk on 'Are your meadows really good for bees?'

Ian Rabjohns will be talking about beetles. Ian is a retired educator and



Tawny Mining Bee (Keith Moseley)

naturalist, and some of our members will know him from the workshop he ran last year on Meadow Making by Hand.

The talks will be followed by a buffet supper, at around 8.30pm, and plenty of time to chat, meet old friends and make new ones. Please book in advance. The supper is £18 for members, £21 for non-members, including two glasses of wine, or soft drinks. There is no charge to members for coming to just the AGM and talks (£3 for non-members).

Directions and the booking form are on our web site

Meadow Surveys and Management Advice

In 2022 Elsa Wood, Sheelagh Kerry, Wendy Tyler-Batt and I managed to visit almost thirty new members to look at their grasslands and give advice on how to enhance the areas for plants and other wildlife.

Already this year we will have visited several new members by the time you read this. We hope to catch up with all the visits that are owed in the coming weeks and months.

If you have been missed out, do please get in touch and let us know.

Also, if we visited you some time ago and you would like another visit for us to see how things have progressed or to give further advice, again do please contact us.

Steph Tyler

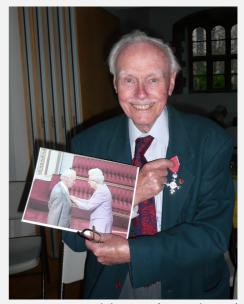
Looking for online help and advice on managing your meadow, where to find contractors to help with cutting and collecting, fencing and other meadow tasks, or a source of local provenance seeds? Take a look at our Help and Advice section on our web site. We have links to various advice sites, and a list of Contractors and Suppliers that our members have used and recommended. www.monmouthshiremeadows.org.uk advice and information pages

Trevor Evans, 1924 to 2023

It is sad news that Trevor Evans, celebrated botanist and president of MMG from its inception in 2003, died in January 2023, aged 98. He may be best known to MMG members for his work on the landmark publication The Flora of Monmouthshire. Others may remember him as a teacher: he spent much of his adult life at the secondary school in Chepstow until his retirement in 1984.

Trevor was a self-taught botanist who started botanising in the 1940s. He soon started contributing plant records to the Botanical Society of Britain and Ireland (BSBI). He became vice county recorder for the BSBI in 1972 and continued in that role until he handed over to Stephanie Tyler and Elsa Wood in 2012.

Trevor was much involved with Gwent Wildlife Trust and for many years was Chairman of their Conservation Committee. He was also a founding member and President of the Chepstow Society which was set up in 1948 to explore the history of the town.



Trevor Evans with his MBE (Ann Robinson)

After his retirement, he organised teams of local botanists to take on different parts of the vice county and record plants by tetrads. This work culminated in 2007 with his Flora of Monmouthshire which maps plants throughout the vice county and for which he wrote informative texts. He had seen huge changes in the 60+ years of recording and was very critical of organisations that had inadvertently destroyed so much beloved good habitat. The Forestry Commission, as it then was, and drainage authorities were singled out for blame!

He received an MBE aged 87 from the Queen for his services to conservation and wildlife in Monmouthshire. He also received an award from the BSBI/Wild Flower Society and was an honorary member of the BSBI until his death. He had a party for his 90th birthday celebrations in 2015.

Trevor was married to Ursula T. Jones (Thelma), also a great field botanist (many records in the Flora are attributed to TGE and UTE). Thelma sadly passed away in 1999. They had two sons, Nigel and Nicholas. We send our condolences and best wishes to their family.

Ten Years On - A Review of our Aims in 2013

When we produced our tenth anniversary book Wildflower Meadows in Monmouthshire we included a review of our objectives for the coming ten years. Now it's ten years on, which has prompted another look at what we hoped to achieve. Here is the list from 2013;

- ♦ Learn from and build on our experiences over the last 10 years
- ◆ Provide regular attractive and informative newsletters and a good quality website
- ◆ Continue to hold Open Days so that people can enjoy good quality species-rich grasslands
- ♦ Continue carrying out surveys and giving advice where desired
- ◆ Re-survey some sites at a different time of year from when first surveyed to identify more species but also to assess the effectiveness of their management
- ◆ Help members find local contractors to cut hay and to control Bramble, Bracken etc, and also to use the MMG Tracmaster where appropriate. Consideration will be given to the purchase of a small baler to attach to the Tracmaster
- ♦ Help members find graziers to provide stock to graze pastures or for aftermath grazing in hay fields
- ◆ Continue to organise work parties to help members with a problem
- ◆ Ensure all good species-rich sites are confirmed as Local Wildlife Sites so that owners can benefit from available grants
- ♦ Help eligible members to obtain grants for capital works
- ◆ Spread the word about the importance of species-rich grassland and the need to manage it to avoid coarse grasses, brambles and scrub developing
- ♦ Help schools, church groups, local communities and councils develop wildflower meadows in churchyards, school grounds, road verges and other public spaces
- ♦ Encourage gardeners to find a place for mini meadows
- Attract more members especially in the central, northern and western areas of the county
- ♦ Inspire people in other areas to create meadow groups
- ♦ Help people to develop their plant identification skills
- ◆ Continue to co-operate with and support partners working to conserve wildlife and protect biodiversity

While there are a few areas where we could have done more, on the whole we feel we have achieved most of these aims, and it serves as a check list for the next decade. In addition, we now have responsibility for three of our own reserves, our membership has increased substantially and there are more meadows groups in existence, many of which we have helped in their early days.

As a voluntary group we can only do so much, and we rely on help and support from our members to continue. If you would like to be more involved, and take on a role promoting any of these aims, we would like to hear from you.

From the archives: founder members Diana Bevan and Stephanie Poulter talk to then First Minister Carwen Jones during his visit in 2006 (picture: Maggie Biss)



An eDNA Survey of Grassland Fungi in Monmouthshire Jon Dunkelman

Jon Dunkelm

This article summarises the results from a study investigating the presence of grassland fungi DNA in soil samples taken from 30 sites in Monmouthshire in spring 2022. The survey was undertaken by Gwent Wildlife Trust (GWT) in collaboration with Aberystwyth University and we thank these organisations, and in particular Andy Karran of GWT for leading the project.

Our Site

Our land, on The Narth about 6 miles south of Monmouth, was chosen as part of the survey as we have good records of the grassland fungi found here to compare with the DNA results. We have about eight acres of sloping land, over half of which is unimproved grassland managed as meadows with aftermath grazing. Since moving here in 2011 we have recorded 54 CHEGD species here.

CHEGD refers to the number of indicator species found at a site, which is a measure of the site's importance for grassland fungi. It derives from the initial letters of the genera that were originally included in this category: *Clavaroid* (Clubs, Spindles and Corals), *Hygrocybe* (Waxcaps), *Entoloma* (Pinkgills), *Geoglossum* (Earthtongues) and *Dermoloma* (Crazed Caps). The original definition and species names have expanded and changed somewhat – for those interested there is a fuller explanation in our *book Grassland Fungi: A Field Guide* (page 3).

The Process

I was approached by Andy Karran in early 2022 as GWT had obtained funding from the Welsh Government Rural Development Programme to undertake some eDNA testing. The 'e' stands for environmental meaning that the genetic material is obtained from samples of soil, water, air or other environmental sources. The use of eDNA surveys in regard to fungi is useful to help identify valuable sites that might otherwise be overlooked because of the ephemeral nature of fungus fruiting bodies (the mushrooms and other parts usually seen above ground) and the difficulties of identification.

The method was to take soil samples using a small corer from an area 30m by 30m, to a depth of about 10cm. The samples were sent to Aberystwyth

University where there is the expertise and technology to extract DNA and identify the species present.

The Results

The results were amazing. The headline for me was a further 20 CHEGD species present on our land which I had not recorded. What is more, this is from just two 30m x 15m areas from meadows totalling about 5½ acres.

From a personal point of view I am pleased that no Waxcaps were detected that I had not yet recorded! My daily checks of the fields ensure that none of these generally colourful fungi are missed. However, for the other CHEGD species it is a different story.

The most surprising results were the Clubs, Spindles and Corals. The eDNA results revealed thirteen species. I had previously detected eight species here, but only four species appear on both lists. That takes the number of Clubs/Spindles/Corals here to 17. Some are species I had not heard of, such as Ramarioposis avellaneo-inversa (which doesn't have an English name) which apparently has only been recorded as a fruiting body in New Zealand and Italy. It is entirely possible that the difficulty of identifying Clavaroid species accounts for some of those missing from my records. example, the DNA revealed Clavaria falcata which is very similar to the White Spindles (Clavaria fragilis) which I had recorded. However looking at the overall results across Monmouthshire I see (for example) that DNA from R. avellaneo-inversa was found at 29 out of the 30



White Spindles (Clavaria fragilis), one of the Clavariod species, which grows to about 60mm (Jon Dunkelman)

sites tested, but it hasn't been seen (or at least recorded) at any.

Similarly for Earthtongues, the G part of CHEGD. The first Earthtongue, *Trichoglossum hirsutum*, was recorded here only last year, during a Gwent Fungus Group foray in November. The eDNA survey yielded five different Earthtongue species (but not *T. hirsutum*)!

Lastly Pinkgills (*Entoloma*), which sometimes stump me as they can be difficult to tell apart, but I have, over the years and with a lot of help, recorded 15 species here. DNA of five Pinkgill species was found in the sample, three of which I had not recorded - although I have seen one subsequently.

My Conclusions

Assuming that the presence of genetic material in a sample is a firm indication of a living mycelium, then there are just three possibilities as to why I do not see some fungi despite searching for species most days in the season.

Either they don't fruit, or they are not seen when they fruit, or they have not been correctly identified when they have been seen. Taking these in reverse order:

- I have certainly failed to confirm some Pinkgill identifications and I suspect I have made assumptions that incorrectly identify some Clubs or Spindles.
- I am sure I have missed seeing some specimens, but it is difficult to imagine that five species of Earthtongue have completely avoided my gaze for the ten years I have been here. However, as the only Earthtongue found here was not found by me, I guess these tiny fruiting bodies could be missed completely.
- I know little about, but I have noticed that some fungi don't appear here in some years. Fruiting is not necessarily an annual event and I understand that some fungi may not fruit for decades. This seems to me to be the most likely explanation for the number of CHEGD species recorded here by eDNA but not (yet) seen by me. This is supported by the results elsewhere, so I don't feel too bad about them being missing from my list.



The Earthtongue Trichoglossum hirsutum seen on our land in 2021 but not found in the eDNA survey (Jon Dunkelman)

The Wider Monmouthshire Results

Looking at the results from the full survey, it is astonishing to find that eDNA of some rare species was also found in many other survey sites in Monmouthshire. Most of the sites were chosen because they were expected to be of particular interest as far as CHEGD species are concerned, so we would expect that a number of them would produce some interesting and uncommon species, but just how many were found is surprising to me. The table below shows the results for some of the lesser known and lesser recorded species found, with the last column indicating in how many of the thirty eDNA test sites it was detected. The only one of these species that I have recorded anywhere is *C. flavipes*!

Scientific name	English name	Sites
Clavaria flavipes	Straw Club	29
Ramariopsis avellaneo- inversa		29
Camarophyllopsis atrovelutina	Dark Velvet Fanvault	24
Camarophyllopsis schulzeri	Matt Fanvault	17
Ramariopsis crocea	Orange Coral	23
Dermoloma magicum	Black Magic	16
Hemileucoglossum aff alveolatum		25
Trichoglossum walteri	Short-spored Earthtongue	21
Glutinoglossum pseudoglutinosum		21

Are Hay Fires a Hazard for Meadow Makers?

Following news of a fire last summer in London, which, it was suspected, started with hay bales, MMG member Matthew Lloyd was reminded of some research he conducted a few years ago about the dangers of composting hay.

The risk of a hay fire is very low, particularly with the relatively small amounts of hay produced on our members' hay meadows (fires reported are all on farms where hay bales are stored in bulk). Nevertheless it is worth being aware of the issue.

As hay decomposes, heat and gasses are produced which can, in certain circumstances, lead to spontaneous combustion. The risk increases the higher the moisture content in the hay because this accelerates the decomposition. You can reduce the risk by a) drying the hay well before gathering, b) reducing the volume of the pile, c) keeping the pile dry, d) locating the pile out of direct sunlight, e) locating the pile where the risk of fire spreading is lowest.

Matt reports that he cuts his hay quite late in the year, so is possibly not dried as much as it should be, although late season hay has less sugars which probably reduces heat from decomposition. To avoid a hot spot in the centre, he piles the hay under some shade, and no

Welcome to our New Members

We are delighted to welcome these new members to the group:

Catherine Dooher, Abergavenny
Geoff Mills, Trellech
Jan Stevenson, Upton Bishop
Joanna Kerr, Llanvair Kilgeddin
Rosemary Decker-Thomas, Trellech
Elizabeth Macfie, Abergavenny
Steve & Virginia Hoselitz, Gwehelog
Emma Warmington-Gardner, Whitebrook
Clarissa Fonseca, Llanvetherine

Membership is on a rolling year basis, with reminders sent out twice a year, in spring and autumn. If you have any queries about your membership, contact our Membership Secretary, Marilyn Dunkelman deeper than two or three feet high. A few piles are made rather than a single large one, which can be consolidated in spring when it has reduced in volume considerably, and the initial decomposition has finished. Similar steps can be taken with bales.

Matt writes: "It is a complex area, however In practice I suggest controlling the volume is the best way to avoid a problem, i.e. try to avoid a large, deep pile where the temperature at the centre could rise too high."

There is information on the web, but so far all the articles found refer to agricultural practices rather than small hay meadows, for example:

Keeping Hay Fires from Spontaneous Combustion -Agricultural Insurance Management Services (aimscentral.com)

Combustion warning after hay bales catch fire - BBC News

Matt concludes: "I could not find any clear guidance on when the risk is too high. My only experience was in a pile around six foot high and perhaps 12 feet square, which I quickly spread out having found it very hot at the centre."

So nothing to panic about, but a good idea to be cautious with your hay piles.



From the archives: plant identification at Pilstone House in the early years of MMG, with Diana Bevan, Bill Howard, Steph Tyler and an unknown note taker (picture: Maggie Biss)

Sixteen Years Managing a 'New' Meadow David Emerson

David Emerson's experiences illustrate what can be achieved, but, like all of us, some mistakes were made along the way. It has been a learning process with a very successful outcome...

We have been privileged that our 2.5 acre meadow has recently received Local Wildlife Site status 16 years after we took it over. Our journey has been supported throughout by MMG, and for those newer to meadows it was thought it might be helpful to summarise what that journey has been.

Our meadow is on limestone above the Wye Valley, slightly sloping in itself but bordered on one side by a steep drop down to a tributary of the Wye, and effectively almost a flat hilltop site edged on two sides by established trees. It was a long neglected area of grass only cut occasionally, and was thankfully untreated with either fertiliser or chemicals.

We arrived with a little ecological understanding, so were aware of the importance of infertility for plant diversity. However we had little more specific knowledge about meadow management, and unsurprisingly, alongside what has worked we have made many errors.

Having arrived in April, and feeling the very tussocky meadow should be managed, in the first summer we brought a local contractor in to cut and bale whole area. MISTAKE! We now realise the machinery flattened all existing ant hills and any other soil variations because we weren't aware of them or of their importance. Thankfully overhanging trees reduced the

area of cut and left us with a few ant hills. Now I mark nascent ones with a cane. What that machinery did do more helpfully was to cut into much of the sward leaving bare areas for seeds.

Over the first and second autumns we sowed Yellow Rattle and various flower seeds from a calcareous mix. The Yellow Rattle worked well, and continues to do so but with constant variations in density across the meadow. However we spent several years thinking we'd failed with the seeds. So we then spent money on wildflower plants plugs, only to find rabbits digging these up. We should have waited as we misunderstood that wildflower seeds, unlike garden annuals, can take several years to establish, let alone spread. Only in the last few years

(ie 12 or so years from our arrival) are some like Scabious finally spreading substantially - and all the more joyously so because of the wait. Much change will happen quickly to your meadow, but many changes may be slower and take far longer than anticipated, albeit giving you a growing sense of achievement and joy over many years. It's a long game with some happy returns in early years.

In our second summer and for nearly 10 years thereafter we found local farmers to cut the grass and bulldoze the cuttings into piles, or only to cut and we then raked off the cuttings. Thankfully being on a slight slope we can rake downhill to large piles under the Beech trees along one edge of the meadow. These quite quickly compress, and have now stabilised to remain a few feet high over winter and spring, with a variety of fungi now emerging. Initially we raked off the cuttings immediately, not realising it is better to leave these for a few days to let seeds drop.

We moved here with a small tractor mower, which we have subsequently upgraded, and after raking off, we go over the whole meadow again to cut to a lower height and collect any remaining grass missed in the raking. We may then cut once or twice more in the autumn depending on grass growth. Our more recent mower will also chop and collect the leaves that fall from the trees alongside the meadow, and we now have a substantial supply of leaf mould.



Looking South across the meadow after the August cut with a few clumps uncut

The challenge with getting external contractors to cut was finding a moment when the weather was right in August and when someone with a tractor was available - sometimes we ran into late September before we could cut. Also waiting for all flowers to seed reduced the time window for cutting. After a few years we bought a Tracmaster so that we could cut some areas at different times. We also put in a pond with a liner: it was not part of actual meadow management but we now seeing dragonflies etc over the meadow. Despite being 300' above the Wye Valley we were very surprised to find a Southern Marsh-orchid growing in the overflow area from the pond within a few years.

Meanwhile we cut paths through the meadow so we can walk these and see what's growing. Their edges surprisingly often prove to be where new plants, and especially the orchids, first establish. Although that's a theory for another day around how wind pollination may work, these shorter grass areas feel to be an important part of an overall diverse habitat.

After several years, frustrated by how much damage rabbits were doing to the vegetation we had the entire meadow rabbit fenced, which we recognise is a big undertaking that will not be possible for everyone. We quickly found we had to double the fence height, having watched rabbits take running leaps over the initial fencing. We have found occasional rabbits since but these seem to be caught by foxes or buzzards, and haven't multiplied. The effect on the meadow was dramatic, with much greater growth around the margins which were closest to the burrows, and less need to protect some of the orchids, although the pheasants will still pluck at the flowers.

The management revelation for us was Jon Dunkelman's article (Autumn 2020) about cutting all his meadow 'by hand' by small tractor (although this could also be by scythe). I have written about this previously so will not elaborate beyond saying that cutting the whole meadow with our own Tracmaster immediately freed us up to cut when we want when the weather is suitable. It has also enabled us to leave areas with later flowering plants, and to avoid ant hills or any other feature. Although taking more of our time, this has been a

key positive change for our management leaving us more in control. Besides what we learned from Jon, we rely on the Newsletter for small tips and the experience of others, as well as for confirmation or otherwise of the management we are undertaking.

During these 16 years many more plants have arrived but understanding how and why is a separate detective story. Citing just the orchids alone: besides the Marsh-orchid above, two Green-winged Orchids appeared six years ago and which have now expanded to nearly 20 plants. We know of no Green-wingeds locally so were this duo long lurking in the meadow and liked the new conditions, or how did they arrive, and why in the strange spot in which we found them? They are an encouraging example of what nature will do: as were Common Spotted-orchids which have grown from one 12 years ago to 5-600 flowering now. We do nothing special to help them beyond the annual cutting. But these also shift around the meadow appearing more strongly in different areas each year, and as does the Yellow Rattle, which we continue to sow in small amounts.

So we find many small mysteries amongst the plants we see, or don't see again - but essentially our experience is that plants and diversity will come in time. We have tried to speed up natural processes by adding seeds or protecting flowers that are of more interest to us. But whatever you choose to do, you will get some rewards in the early years. Just don't be dispirited if some flowers are slow to arrive or develop: every year will be different and better.



Meadow in bloom, with cut path

Members' Meadows

Green Hay

In the summer of 2021 we had solar panels installed at the top of our meadow. The trench to bury the cable bringing the power to the house left a bare scar across the field about 2m wide and I worried how long the sward would take to recover, whether docks etc might proliferate.

When I approached Steph for advice, she suggested strewing 'green hay' over the area from a nearby source, and on the afternoon Ray Armstrong's meadow was cut, Steph and I filled two builder's 'dumpy' bags with some of the cuttings. Steph stressed the importance of spreading the hay out before the day's end, so that evening I lightly scattered the bare soil with the fresh hay before the air cooled.

Over the winter the dried hay withered away, but by spring the area was mostly green with seedlings and by mid summer what had been an ugly gash blended almost seamlessly with the field.

The imported local seed has introduced some welcome additions to our existing flora; Eyebright I noted particularly, but other wild flowers and grasses have also appeared, increasing the diversity of species on our very free draining sandy patch. Hopefully, the hay-making this August 2022 will have scattered the seed from these new species further around the meadow. I shall look forward to seeing any evidence of this next summer as I watch the gradually improving ebb and flow of each year.

Maggie Hamlen, Old House Farm, Lydart

Autumn Meadows

John Hinderer sent a number of photos of Waxcaps he round in his fields at Tintern Cross, including this beautiful Pink Waxcap, pictured below. Under that is a Yellow Fieldcap, a meadow fungus that is found on dung.







If you find something new or unusual in your meadow, or have a story to tell, please send it in to us. Photos of new arrivals, before and after shots, or just a story you can share. We love to hear how our members are getting on, and to share our problems and our successes so we can all learn from our experiences.

Maggie's meadow in Lydart

The Plant Atlas 2020

On 10th March. botanists from all over Wales gathered at the National Botanic Gardens in Carmarthenshire celebrate the launch online 'the most in-depth overview of the British and Irish flora ever undertaken'. Plant Atlas the 2020 produced by the Botanical Society of Britain and Ireland (BSBI).

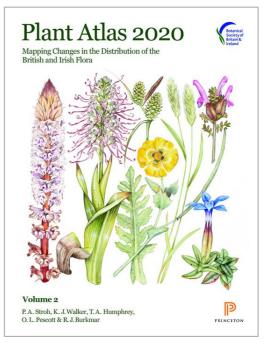
The Atlas is the culmination of twenty years' work recording the plants occurring throughout Britain

and Ireland from the last Atlas 2000 to the end of the recording season in 2019. The subsequent analysis and production of the book took another two and a half years.

Steph Tyler and Elsa Wood, our county flower recorders, contributed to the publication, and have thanked everyone in the Monmouthshire Meadows group and Botany Group who helped to bring their section to fruition.

The 10th March launch was for the Welsh participants with fascinating talks from Kevin Walker (Head of Science at BSBI), botanist and TV presenter Trevor Dines, who was involved with the publication of the previous in 2002, and the legendary botanist/ lichenologist/naturalist Ray Woods, who had a long and illustrious career at Plantlife Cymru.





Ray Woods highlighted the changes in species distribution over the years from the first Atlas in 1962 to 2020.

Commenting about the results from the Atlas, Elsa Wood reports "What is particularly noticeable and rather alarming, is the decline in many native species compared to the increase in alien and introduced species."

The meeting was concluded by an address from the head of the Botanic garden congratulating the enormous efforts of over 800 botanists to produce this work.

The Atlas is available to buy from Princeton University Press and the online resource can be accessed at www.plantatlas2020.org

News From Around

The Heritage Seed Library



In February MMG had Porganic a stall at the Seed Swap in Monmouth, organised by a

group from ACE Monmouth and Transition Monmouth in aid of the Heritage Seed Library (HSL), the organisation that maintains the national collection of heritage vegetables and aims to conserve vegetable varieties that are not widely available, sharing seed with their members. It is run by Garden Organic, the working name of the Henry Doubleday Research Association. While the HSL is about gardening rather than grasslands, we do share an ethos of promoting nature, avoiding pesticides and protecting our pollinator species. If you are interested in the history of rare seed and heritage varieties, you might be interested in reading The Seed Detective by MMG member Adam Alexander (published by Chelsea Green Publishing) and available through book shops.

Eyebright Survey

Elsa Wood, joint county flower recorder, is mapping the distribution of Eyebright species in the county. Most eyebrights are recorded as *Euphrasia agg*. but there are 10 separate species in Wales, that are under-recorded.

If you have Eyebrights and your land was not surveyed by either Elsa or Steph Tyler last year, can you please let Elsa know and indicate if you are happy for her to visit briefly to identify the species. She can't guarantee to visit everyone this year but hopes to get round as many as possible. elsa@thenurtons.co.uk



Eyebright (Jon Dunkelman)

How Does Yellow Rattle (and Eyebright) Help Your Meadow?

Have you wondered why Yellow Rattle is such a good 'meadow maker'? It is one of a group of hemiparasitic plants which steal water and nutrients from other plants as well as photosynthesising themselves. There are other plants that perform this grassland conservation function from the broomrape family *Orobanchaceae* which includes Yellow Rattle, Red Bartsia, Eyebright, Lousewort and Yellow Bartsia.

All will help to increase biodiversity by weakening grasses, letting light through to other plants, and reducing competition. Plants vary in their susceptibility to attack but grasses are particularly vulnerable to Yellow Rattle. Once established, Yellow Rattle can become dominant, but this generally reduces over time as it is outcompeted by other plants giving rise to much greater diversity. There's a useful summary about this useful group of plants on the Irish Plants blog from Jack Dalzell.

Hedgehog Aware



Local hedgehog champion Dylan Allman started his Hedgehog Aware campaign in the summer of 2020, when he was just 13 years old, after discovering an injured hedgehog in his

garden. Looking for ways to reduce the number of injuries suffered by hedgehogs from gardening activities, Dylan has taken every opportunity to publicise their plight. He is now an official Hedgehog Hero for the Wye Valley AONB's Wye Hedgehog project. His web site www.hedgehogaware.org.uk is a mine of information about hedgehogs and how to protect them. He has been a guest speaker at numerous clubs and schools, exhibited at community events, and spoken on various media channels including Radio One and the BBC One Show. His short film The Wonderful World of Hedgehogs won an award from the University of South Wales's Film and TV Schools. It's an astonishing record for such a young campaigner.

His latest success has been to persuade Hyundai Power Products to add Hedgehog Aware stickers to their strimmers and mowers. The stickers remind power tool users of the need to check for hogs. Strimming is one of the main causes of hedgehog injuries in the garden.

Dylan lists four things gardeners can do to reduce the number of injuries:

- Check long grassy areas for hedgehogs (and other wildlife) before strimming or mowing
- Make sure ponds have an escape route for hedgehogs such as a sloping ramp - they are good swimmers, but can't climb out of ponds without help
- Keep netting to a minimum, always keep it tidied, with no loose ends, and ideally at least one foot from the ground to stop hedgehogs becoming entangled
- Stop using pesticides and slug pellets in the garden these can be fatal for hedgehogs (and other wildlife)

Report your Hedgehog Sightings

Wye Valley AONB's campaign seeks to increase understanding of the distribution and abundance of hedgehogs in the Wye Valley, through conducting surveys and working with local communities to take action for hedgehogs. They would appreciate help in recording where there are hedgehogs in the AONB. If you live in that area and see a hedgehog please let them know: include a grid reference or what3words address to Ellie Baggett naturerecovery@wyevalleyaonb.org.uk.

Dates for your Diary

The list is, of course, liable to change and you should confirm details in advance. Updates will be published on our web site, and by email bulletin to our members, together with activities of interest that we hear about from other organisations.

Friday 14th April: Chepstow Walking Festival: Meadows Walk with a stroll around New Grove Meadows and Trellech Wet Meadows at the end of the 5.6 mile walk. Details on the Festival web site. The Festival runs from 11th to 16th April and is organised by Chepstow Walkers are Welcome

Thursday 20th **April: MMG AGM and Spring Social** at Cross Ash Village Hall, with speakers and buffet supper. Details and Booking form here

Saturday 22nd April: Monmouthshire Botany Group walk at Kemeys Craig (see below for details)

Saturday 13th May: Monmouthshire Botany Group walk at Llanover House and surrounds (see below for details)

Saturday 10th June: Monmouthshire Botany Group walk at The Punchbowl/Blorenge (see below for details)

Saturday 10th **June: Cwmcarvon Family Nature Day**, at Cwmcarvan church, a family activity day as part of the 'Churches Count on Nature' week (3rd to 11th June)

Sunday 11th **June:** MMG **Open Meadows Day** with sites to visit in the area of Trostrey and Gwehelog (details to follow)

Wednesday 21st June: Monmouthshire Botany Group walk at Henllys Bog (see below for details)

Sunday 25th **June: Plant Identification course** with Steph Tyler at Trellech Wet Meadow (contact MMG for information)

Sunday 9th **July: Friends of the Lower Wye** are holding a second **Wye July** festival in Monmouth, 11am to 3pm on Chippenham Fields (behind Waitrose Car park) A free event focussing on families and children, stressing the importance of involving the next generation in saving our Rivers and Wildlife

Saturday 15th **July**: **Monmouthshire Botany Group** walk at Lasgarn Wood/Mynydd Garn Clochdy (see below for details)

Saturday 19th August: Monmouthshire Botany Group walk at Sirhowy Valley (see below for details)

Saturday 26th & Sunday 27th August: Learning to Scythe courses (contact MMG for information)

Saturday 9th September: Monmouthshire Botany Group walk at Haterall Hill (see below for details)

Saturday 23rd / Sunday 24th September: ACE (Action on Climate Emergency) Festival in Monmouth

Monmouthshire Botany Group: Botany Walks

The Botany Group Walks programme is provisional as some venues may be changed. Days start at 10am continuing until about 3-4pm. All days are for helping to improve ID skills and for recording. Booking is essential, contact Steph Tyler via MMG. Further details on the BSBI web site

Other Events

There are many other events organised by Gwent Wildlife Trust, SEWBReC and other conservation organisations so do check out their listings as well:

Gwent Wildlife Trust Events Calendar

South East Wales Biodiversity Records Centre (SEWBReC) Events Calendar