



# National Plant Monitoring Scheme

Monitoring our wild flowers

## Newsletter – Winter 2020

**Welcome** to the NPMS Winter 2020 Newsletter! 2020 has been a busy year at NPMS HQ, with the evolution and development of our digital presence, through training and support in response to necessary national and local restrictions. It has also been a time of much excitement with the launch of the annual UK Biodiversity Indicator set published by Defra and JNCC this autumn, to which NPMS has contributed for the first time. And of course, through building new partnerships and continued effort of volunteer surveys: many of you still managed to get out and survey their plots in the latter half of the season! We hope all our supporters and volunteers are keeping well and looking forward to the festive period. This newsletter celebrates your efforts and engagement this season and to date. Plus, we offer some guidance to new members. We also have plenty of news and updates about the scheme and how the data are being used.

Despite a slow start to the season with a temporary cessation of all surveys and then regional lockdowns making getting out and about tricky, we have been so pleased to still see so many volunteers engaging with the scheme in other ways, and of course very glad to see data still coming in for this season. Please do not worry if you did not manage to get out to your plots this year, but plan to restart in 2021. We completely understand and expect coverage to be reduced this year.

The huge value of your data will not be affected, so please do not be deterred and do look forward to getting back out next spring if it has not been possible this year.

We have enjoyed hearing how you have been keeping busy and engaged this season, with some of your stories shared in the newsletter below. Please do keep sharing these with us via email and social media. We think it is even more important to feel connected through our volunteer community at the moment!



Arable field margin - © Luke Morton, Plantlife



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### THIS ISSUE:

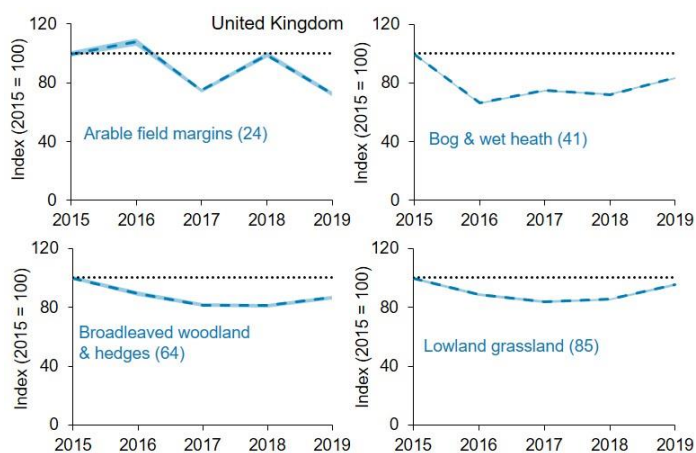
- ❖ UK Biodiversity Indicators are published
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## NPMS Contributes to first ever annual UK habitat condition indicator!

Dr Oli Pescott, UK Centre for Ecology and Hydrology

Trampling the countryside relocating our plots, scratching our heads over a non-flowering plant fragment, stroking our chins deciding on a cover-value for a species in a plot – all this is likely familiar to the intrepid NPMS surveyor. But, beyond all this sweat and concentration, what happens to the marks that we scratch onto our recording forms, or tap into the website or app?

Well, 2020 has been a stand-out year for being able to demonstrate how all this information is brought together and turned into insights about our countryside. This year, for the first time ever, volunteer-collected habitat data, that is to say, the National Plant Monitoring Scheme data, **YOUR** data!, have been included as an experimental “Official Statistic” within the annual UK Biodiversity Indicator set published by Defra and JNCC. Specifically, NPMS data from four of the scheme’s best surveyed broad habitats have been used to create four new indicators for category C7 “Plants of the wider countryside”. The habitats included are arable margins; broadleaved woodland and hedges; bog and wet heath; and lowland grassland. This link will take you to the published indicator for more information: <https://rebrand.ly/c7indicator>



Abundance of plant species in 4 UK broad habitat types, 2015 to 2019, taken from the UKBI report.

So how do these habitat indicator lines relate to the data that **you** painstakingly collect in the field?

Well, first off let us note that these habitat lines are averaged across data relating to all the positive indicator species used by the NPMS, whether collected by Wildflower, Indicator, or Inventory surveyors. For any given positive indicator species within a broad habitat type, all of the percentage cover data (collected by you on the Domin scale), including zeros (i.e. absences), are used to model changes in the average percentage cover across the years that the scheme has been collecting data. Some fancy statistical tricks are used here to try and account for occurrences of plants that might be overlooked due to the time of year, or because they are difficult to identify etc., but the essential output is a trend in percentage cover for an indicator species in a broad habitat over time. These are then averaged to create the habitat-specific lines as shown to the left. For the curious, much more information is available at the JNCC website, also linked across leaf, and even more detail in the references linked from there!

No doubt, at this point, some of you are wondering what will happen with the other data that we are collecting, e.g. trends for non-indicator or negative indicator species, broad habitats not covered by the current experimental indicator set, and, last but by no means least, all of the other habitat, photographic, and other management information collected. In general, we have many aspirations to investigate environmental change in more detail across NPMS habitats, and all of the preceding information will certainly be used in this way in the future. Specifically relating to the indicators, it is likely that we will also make individual species/broad habitat trends available through the NPMS website in the near future, enabling all volunteers to investigate their favourite habitats or species (data allowing!) However, whilst there is certainly always more work to do in terms of data collection, analysis, and interpretation, let us collectively take this moment to also pause and celebrate how far the NPMS and its dedicated cadre of volunteers have come in six short years!





## NPMS in 2020

2020 has been a very tricky season for many if not all monitoring schemes. The NPMS was no different, between the temporary cessation of all surveys in early spring and then later local restrictions. We were expecting a reduction in data submitted this year, but we have been so pleased and grateful to see that we have received data from ~230 1 km survey squares this season, comprising ~1,500 plots (and still coming!) Thank you so much for your efforts. The number of 1 km squares for which the scheme has data for has also increased this year, to > 910, highlighting that new volunteers are becoming involved with the scheme in parts of the country previously lacking surveys. Indeed, in the last year, we have recruited ~250 new volunteers and > 380 NPMS survey squares have been allocated. A huge welcome to all new volunteers joining us, we are looking forward to supporting you in 2021. We are very much looking forward to updating our analyses with this season's data through the winter and feeding these results back to you in the new year.

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**Your NPMS in 2020:** *It's been a tricky year, with many volunteers struggling to get out to their sites this season owing to COVID restrictions and related barriers. But here are some volunteer experiences from a very different season.*



It was Victoria Burton and Andrew Beech's 4<sup>th</sup> year surveying with NPMS, and they were so excited to find a Bee orchid within one of their plots. *"It was certainly extra beneficial for our well-being to be able to get outside with a purpose during a difficult time."* They were sure to observe social distancing rules – including for their traditional fieldwork selfie snap!



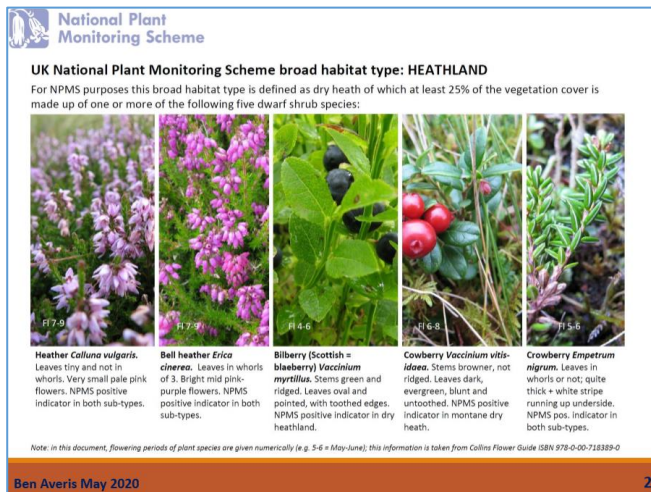
Emma Williams fed back that *"The NPMS zoom session series has been the highlight of my lockdown"*. Once restrictions were relaxed in South Wales, Emma found herself a different challenge when trying to reach her square. Rhondda had suffered significant land movement including landslides, and the route she would normally take had a massive fissure, several hundred metres in length, some sections 8ft wide and up to 12ft deep! Thankfully Emma is very experienced in the area and is investigating different routes on the other side of the valley. Great effort!



From new volunteer Geri Skeens: *"Two local surveyors kindly came to help me reccy my Dartmoor square - Following Social distancing guidelines at the time! They showed me how to measure out a plot and we found montane acid grassland, a lovely flush, plenty of bog and a little quarry. With support like this, I know I'll be ready to survey next year."*

## Training 2020 and plans for 2021

In 2020 NPMS developed an online training programme, with instalments on a variety of themes, all housed on the [NPMS website](#). The materials for each theme include a learning aims and outcomes record, themed presentations, and supporting materials. These are publicly available and will remain on site for volunteers to download or refer to. These themes vary and incorporate NPMS survey methodology, habitat specific training, and data guidance. A habitat-themed week includes a habitat focused presentation covering the NPMS habitat definition and subdivisions, as well as the main vascular plant species present, focusing on NPMS indicators and the range of floristic variation.



Accompanying these were separate documents of supporting materials on each theme, comprising a comprehensive list of useful links, species ID videos, and relevant references.

We also held bookable data surgery sessions, as well as a series of regional volunteer virtual meetings that volunteers booked onto for their area.

Thank you to everyone who took part in our first online quiz for volunteers and fed back on their experience. As well as being fun and interactive, it complemented your learning and proved a useful tool to help us to understand how volunteers at different levels are doing with their ID of indicator species and helped to identify training needs. The survey recorded over **170** participants from an even spread of surveyor level and time with the scheme.

So, we've been busy online this season and have reached a large number of volunteers, new and experienced. There were **18** zoom sessions in total with **320** participant places attended. The NPMS Online training web page has received **> 7,000** hits

since May. Thank you to all who have visited and engaged with the training!

Also, thanks to those who have answered our participant feedback questionnaire. This helps to shape the training programme for 2021. Feedback has been largely positive, the majority of participants thus far (96%) would like us to continue providing digital training next year.

### Training 2021:

We are currently planning a blended learning approach for 2021, with (fingers crossed!) both face-to-face and online sessions and materials. Having taken your comments on board, we will be looking to record existing presentations, filling training gaps, developing additional training videos, and incorporating more interactive elements such as informal sessions and quizzes. So do look out for notifications of the upcoming programme.

## NPMS Winter Tweet #NPMSfest

Join us this festive season, for our Winter Tweet Meet on Friday 18<sup>th</sup> December (11am – 3pm)!

This is a social media event held on our twitter account [@theNPMS](#) using the hashtag **#NPMSfest**. Our aim, is to bring together botanists, volunteers and supporters of the NPMS from around the UK to encourage communication and collaboration.

A fun photo competition will be launched to encourage you to share your survey pics! The competition will run 19<sup>th</sup>-31<sup>st</sup> December 2020, with the winner receiving a National Trust Northern Ireland prize, to be announced by the 8<sup>th</sup> of January 2021. A great way to start the new year. Images are entered using the hashtag **#NPMSLockdown** and the winner is simply the image with the most likes and retweets combined.



All welcome to join in - it's the season to be jolly! Guidance on getting involved can be found [here](#).



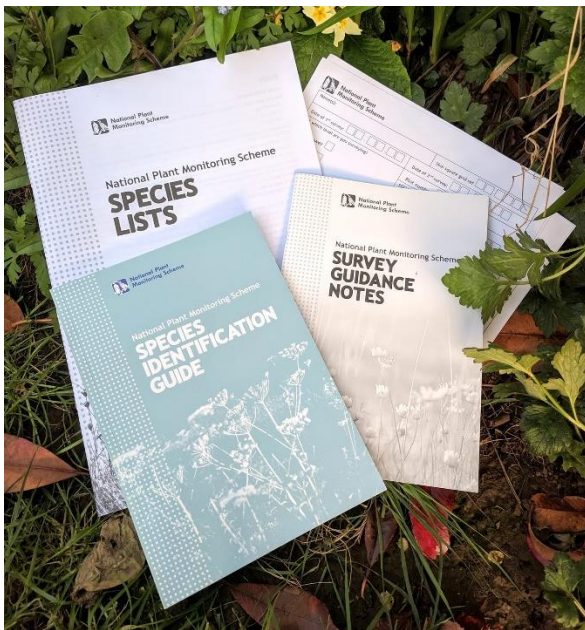
## Getting started with the NPMS: Tips for Newbies

Kevin Walker, BSBI

*Starting out on any monitoring scheme can be quite daunting and the NPMS is no exception. So, here's a few tips to help get you started. They are based on personal experience and feedback from participants over the last six years of fieldwork.*

### Read all the guidance carefully

As a new member of the scheme you should have been sent lots of guidance on how to participate. The amount can be quite daunting, so to start with just focus on the [Survey Guidance notes](#) - this is your NPMS bible so please read it carefully. If the answer isn't there, then check out the other resources on the NPMS website. Don't wait till you get out into the field to read it for the first time!



### Carry out a recce physically and virtually

It's really important to recce your square before attempting to set up plots. This will allow you to familiarise yourself with the access points, landowners, and the habitats present. You can even do this virtually using Google maps, as aerial photos can tell you a lot about what habitats are present, especially obvious ones such as woodlands, waterbodies, and arable fields. I've even used Google Streetview to look at habitats remotely in the past! You should also have been sent some maps showing where habitats of interest are likely to occur. These can be useful in helping you to plan which areas to focus on, although remember that reality on the ground can be different!



### Sorting out access

Possibly the biggest obstacle to starting the scheme is gaining permissions to carry out the survey. There are no short cuts to doing this, and it can be time consuming, but it is ultimately worthwhile so you can visit areas without the fear of being challenged. So, what's the best way to do this? Unfortunately, there is no public register of who owns land. So often the best way is to look for points of contact during your recce. These could be farm or estate names on signs which often have contact details for people you can ring. If you are lucky enough to live in a National Park or AONB then staff, they may be keen to help. There are also a number of useful tips and links on access in our [FAQs](#). Failing that simply knocking on doors or asking locals can often elicit the answer you need. But please remember these are tricky times for such contact and do abide by local restrictions. This type of contact may need to wait.

### Training, support and guidance

The NPMS provides a number of training sessions, so see if there are any scheduled for your area. They provide excellent introductions to the scheme and allow you to meet other surveyors. Due to COVID we have also produced a lot of [online material](#) that explains the basics of the scheme, as well as information on habitats and indicator species. NPMS also has regional mentors who will be happy to answer questions or meet up with you in the field to help set up plots; again, please abide by COVID guidelines. In addition, the scheme volunteer coordinator is also always on hand to answer any questions you might have via [support@npms.org.uk](mailto:support@npms.org.uk).



### Marking out your plots and re-finding them!

Marking out and re-finding plots can be quite challenging if you've never done it before. When marking it's important to try to get your plot as square as possible. To do this I often use a '3-4-5 triangle' to create the right angles for the corners – hopefully you'll therefore end where you started off. When recording plots, I also take out some marking canes and some string so that the area to search is clearly defined. Sometimes I also divide the plot up so the whole area is easier to search. Without permanent markers re-finding plots is always a challenge so I tend to take photographs from each corner so it's easy to position it against its surroundings when I return. I also always draw a detailed sketch map showing obvious permanent features – but beware – “permanent” features such as fence posts etc. can disappear!

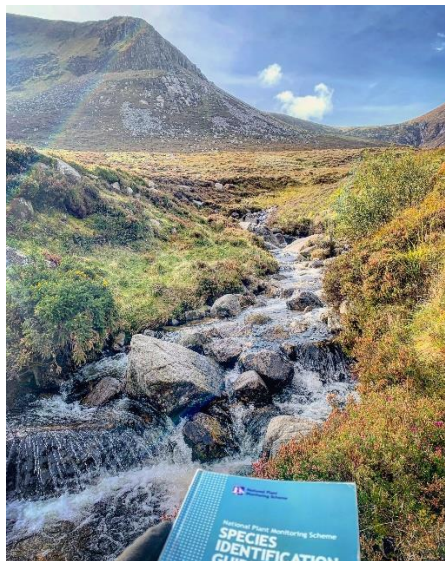


### Take photos!

One of the main challenges for new starters to NPMS is identification of habitats and species. For habitats there are lots of useful presentations and resources on the [NPMS website](#), as well as the descriptions in the back of the survey guidance booklet. *Britain's Habitats* by Sophie Lake and Dyrwyn Liley is also an excellent resource that covers all the habitats covered by NPMS. For species you should have a copy of the NPMS identification guide which covers all the indicators. There are also lots of good identification guides available including David Streeter's *Collins Wildflower Guide* and Francis Rose's *Wildflower Key*. And for those of you who like phone apps there is also *Flora Incognita*, which is free to use and seems to be one of the best ID apps for the British and Irish flora. If you are still struggling, then remember to take lots of photos and send them into the NPMS team who'll always be happy to help with identification.

Most importantly - Have fun!

### More of your images...



Claire O'Reilly - Mournes National Trust ranger - snapped this stunning view when surveying with colleague Marc Vinas and a local volunteer this season, in some of the most beautiful mountains of N. Ireland. They've been getting stuck into plant monitoring and contributing to the scheme “to assess changes in plant abundance, diversity and ultimately helping assess habitat health”. What a fantastic site.



Volunteer James Darke spotted this gorgeous Clustered Bellflower (*Campanula glomerata*) on the way to his NPMS square in Gloucestershire.



After just two years of surveys, Tim Purches has found that changes to one of his plots on Dartmoor are already visible, with Western Gorse becoming more dominant.



## NPMS News and updates:

### **An introduction to Sarah Shuttleworth: NPMS Volunteer manager for 2021**

A big welcome to the NPMS Team for Sarah Shuttleworth! Sarah is joining the NPMS team this month and for the duration of 2021. She will be taking on the role of Volunteer Manager, based with Plantlife, while current volunteer manager Rachel Murphy bids us a temporary farewell to head off on maternity leave.

#### **An introduction to Sarah:**

A self-confessed natural history buff from an early age (from birds to botany), Sarah's last role was working as a Wildlife sites project officer with the Warwickshire Wildlife trust. Where she threw herself into developing her plant ID skills, discovered a passion for teaching botanical field skills to her volunteers and adding to herbarium records.

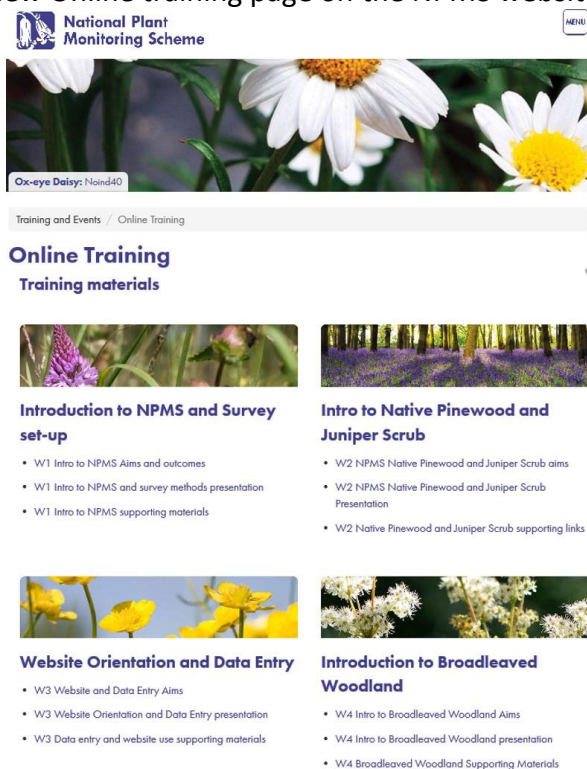


Now seeking a more rural life with her family in Somerset, Sarah is bursting to get stuck in to the NPMS and excited by the prospect of supporting our volunteers, developing our training programme and helping to build community of plant experts. A key attraction to the role has been the fact that the NPMS is built on the foundation of volunteers getting out there surveying and data gathering - Providing the data to evaluate the status of our wild plants and habitats we all love and value so much. It is impressive that the data collected has already led to the early stages of a National Biodiversity Indicator, which will be a vital strategic tool in monitoring and protecting our habitats. This is only possible by the extreme dedication of the volunteers that make it happen, and Sarah is looking forward to working with you all.

You can read a full interview with Sarah [Here](#).

## **NPMS Website updates:**

If you haven't yet visited, do take a look at our new Online training page on the NPMS website.



The screenshot shows the NPMS website's Online Training page. At the top, there is a navigation bar with 'National Plant Monitoring Scheme' and a 'MENU' button. Below this is a banner image of Ox-eye Daisies with the text 'Ox-eye Daisy: Noid40'. The main heading is 'Online Training' with a sub-heading 'Training materials'. There are four featured training materials, each with a thumbnail image and a list of bullet points:

- Introduction to NPMS and Survey set-up**
  - W1 Intro to NPMS Aims and outcomes
  - W1 Intro to NPMS and survey methods presentation
  - W1 Intro to NPMS supporting materials
- Intro to Native Pinewood and Juniper Scrub**
  - W2 NPMS Native Pinewood and Juniper Scrub aims
  - W2 NPMS Native Pinewood and Juniper Scrub Presentation
  - W2 Native Pinewood and Juniper Scrub supporting links
- Website Orientation and Data Entry**
  - W3 Website and Data Entry Aims
  - W3 Website Orientation and Data Entry presentation
  - W3 Data entry and website use supporting materials
- Introduction to Broadleaved Woodland**
  - W4 Intro to Broadleaved Woodland Aims
  - W4 Intro to Broadleaved Woodland presentation
  - W4 Broadleaved Woodland Supporting Materials

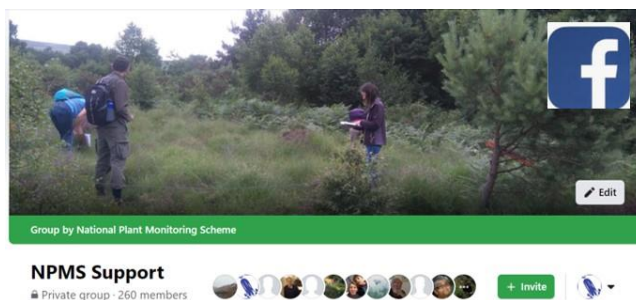
As ever, work has been ongoing all year to make this platform ever easier to navigate and use. So, thank you for all your feedback and suggestions through the year. We are always busy behind the scenes with updates, tweaks, and data recording improvements.

## **NPMS Support Facebook Group:**

We have been pleased to see the NPMS support Facebook group has been an active hub of volunteer sharing and queries this season.

Following feedback, we have now created regional topic boards within this closed group to enable and encourage local linking-up and conversations between volunteers in the same area. We plan to introduce regional mentors on these ahead of the 2021 season.

If you are on Facebook and interested in joining, here you can request to join [NPMS Support](#).



The screenshot shows the NPMS Support Facebook group page. It features a cover photo of two people in a field, a Facebook logo, and a green bar at the bottom with the text 'Group by National Plant Monitoring Scheme'. Below this, the group name 'NPMS Support' is displayed, along with a profile picture of the group, the text 'Private group · 260 members', and an 'Invite' button.

## More on NPMS Comms:

Another NPMS welcome, this time to Erin Shott! Perhaps a familiar face for anyone who has joined an online training session with us this season (Erin is our tech whizz!).



Originally hailing from Michigan, USA - Erin is based at Plantlife Scotland, and has now joined the NPMS family each Tuesday to support our social media, comms and outreach activities.

## Mountain Training Association:

We are very pleased to have joined up with the Mountain Training Association (MTA) this season to help promote the scheme and training opportunities to MTA members.

It can be difficult for all terrestrial monitoring schemes to gain great coverage of remote upland areas and associated habitats. So, we are looking forward to building this relationship with both experienced and in training mountaineers in the coming year. Indeed, the MTA have already provided a short series of upland habitat specific training to members this winter and have some exciting plans for the spring ahead.

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## NPMS habitat feature: Lowland Grassland

Kevin Walker, BSBI

### NPMS habitat feature: Lowland Grassland

Lowland grasslands are some of our richest and most loved wildflower habitats – from chalk downland buzzing with insects, to damp meadows knee-deep in a myriad of herbs and grasses. For centuries they have been an integral part of our rural landscapes providing us with food and raw materials to clothe and house us. But they are declining. Since the Second World War we

have lost most of our ancient grasslands to ploughing, and those that remain are becoming less species-rich due to changing agricultural practices and pollution.

### What does Lowland Grassland include?

‘Lowland grassland’ is a very broad term that includes a range of grassland type that largely occur below 300 m altitude on acid, neutral, and calcareous soils. They include grasslands with soils that are periodically wet (but not permanently saturated) to bone dry. But the key to their diversity is that they have been free from artificial fertilisers or reseeding with forage grasses and herbs – in this sense they are ‘unimproved’, unlike the nitrogen-saturated green pastures that we see all around us today.

Neutral pastures and meadows are (or were) the most widespread lowland grasslands that formerly covered much of lowland England before arable cropping became the norm in many regions. They range from continuously grazed pasture to hay meadows that are ‘shut-up’ for hay in the spring and summer months and then ‘aftermath grazed’ by sheep or cattle. Most of these would have probably been cropped at some point in the past and many still have the ‘ridges and furrow’ to prove it. They are home to many once common species such as Green Winged Orchids and Cowslips.

Neutral damp grassland occurs in similar locations, but only where the soils are periodically saturated such as low-lying areas near to waterbodies, floodplains, and areas with impeded drainage.



©Kevin Walker

At the other extreme are the dry grasslands that occur on free-draining soils in the lowlands. These are more localised and consequently have a more restricted and specialist flora.



Dry acid grassland is confined to regions with sandy soils derived from blown sands, river gravels, and acidic rock types. Some of the best examples are associated with heathlands, especially in East Anglia, Surrey and Hampshire and Dorset – but most counties will have some pockets remaining, in some cases that have developed on waste or derelict land with poor shallow soils.

In comparison dry calcareous grassland is restricted to areas underlain by chalk or limestone – these includes the chalk downlands of southern and south eastern England, and the limestones along the southern and western coasts of England and Wales, the Cotswolds, the Midlands and northeast England. These are some of our most species-rich habitats with up to 40 species per square metre including many rarities such as Pasqueflower, Burnt Orchid and Squinancywort. They are usually heavily grazed by sheep and rabbits but increasingly grazing is being relaxed or abandoned and as a result the grasslands are reverting to scrub.



©Kevin Walker

### How are they doing?

It is too early to tell from the NPMS experimental indicator how lowland grasslands are really faring but we know from other studies that they are declining in both extent and quality. Schemes that encourage farmers to manage them more sympathetically by reducing inputs and restoring grazing offer hope that their condition will improve, whilst large-scale restoration schemes of arable land or improved pasture show that they can be restored for the benefit of wild flowers and their associated wildlife. In time, the data NPMS produces will prove vital in tracking how they are changing, hopefully for the better, and could support the modification of land management practices to ensure that they survive into the future.

## We need you!

### Historical data: It's not too late!

If you still have data from earlier this year, or indeed previous years, that have not yet been submitted, these can still be entered to contribute to the NPMS database and analyses. Just enter this data as normal, ensuring you enter the correct survey dates. For any advice on entering data, contact [support@npms.org.uk](mailto:support@npms.org.uk)

### Training feedback – have your say!

Your feedback helps us to plan and deliver more and improved training in the future, hopefully alongside our usual face-to face courses.

If you could please follow the link below to our training questionnaire to help us find out what worked well and what didn't go so well for you, this would be a great help. It should take no more than 7 minutes and your answers will be treated in confidence.

[Training questionnaire](#)

### Mentor positions

Volunteer mentors are a greatly valued part of our team. If you're interested in becoming a mentor, please contact [support@npms.org.uk](mailto:support@npms.org.uk). We just ask that you have a couple of hours free to commit per week (less during the quieter winter months). Full support is given.

### Volunteer representatives:

We would like to bring together (virtually) a group of volunteer reps from a variety of backgrounds and experience levels. If you would be interested in taking part and available for just a few group meetings a year, please let us know at [support@npms.org.uk](mailto:support@npms.org.uk) for more information.



## What's "App"ening in the digital field?

A brief overview of various useful apps that have been recommended to us by NPMS volunteers and staff in the two areas of plant identification and outdoor navigation.

### Plant identification apps

Although we are not quite yet at the point where field botanists are to be replaced by machines, in the last few years automatic species ID from photos has come on by leaps and bounds, and can be a very useful confidence booster for the beginner, and of course a handy crutch for those of us who occasionally suffer from memory fades!

**Plant.id** (<https://plant.id/>): This website (rather than app) allows the user to upload 5 photos a week, but has been found to perform well in tests reported in a recent issue of *BSBI News* (April 2020).

**PlantNet** (<https://identify.plantnet.org>): Available as an app or as a website, the classifier underlying this app is continuously updated, meaning that it is improving all the time as new images are submitted.

**Seek** ([www.inaturalist.org/pages/seek\\_app](http://www.inaturalist.org/pages/seek_app)):

Produced by the team behind the global recording platform iNaturalist, this app had relatively low error rates in the tests reported in *BSBI News*.

### Navigation

**Grid Reference app** (<https://rebrand.ly/GRapp>): A simple app that reports grid references up to 10 figures with associated accuracies.

**iRecord app** (<https://irecord.org.uk/app/>): Although primarily an app for biological recording, Ordnance Survey maps are included as standard. Grid references can also be captured if one begins to enter a record (this need not be completed or submitted).

**And last but not least, the NPMS App!**

## A day in the Mourne Mountains with the NPMS App: Abigail Maiden, DAERA-NI

Ever used the NPMS app? Why not give it a try next time you are out surveying? Here I talk about mine (NPMS NI coordinator) and Lorna Somerville's (NI Mentor) experience trialling the app in the Mourne Mountains this October.

Before setting off we downloaded the NPMS app from the [Apple/Google](#) store, and ensured our plots were already set up on the website. This is important. Your plots need to be entered manually

via the website before you can use the app. So, it's better to use the app when revisiting your square rather than on your first visit.

Starting the day at Spelga Dam car park, we familiarised ourselves with our squares, plots and NPMS guidance before heading to our first square.



Our first port of call was a wet heath plot which was relocated easily by using previous plot sketches and photos; we found using the sketches fundamental in relocating the plot and would 100% recommend using them. It is also a good idea to take fresh photos and update your sketch, each visit. We paced out our 5x5m survey area using our walking sticks and daysacks as pacers and corner markers respectively. With our plot marked out, we selected the wet heath plot and the inventory recording form on the app and then the fun began! We recorded, in the app, all species present within the plot such as Cross-leaved heath (*Erica tetralix*), Tormentil (*Potentilla erecta*) and Common cottongrass (*Eriophorum angustifolium*). Once all species were accounted for we entered their associated percentage cover, using the Domin scale and submitted the data.

Despite having no signal, the app was able to store our data until the phone gained signal that evening when it then uploaded our day's findings. This means the app is very versatile in terms of the location it can be used in. Furthermore, after finishing our last plot of the day – a lovely fen, the phone ran out of battery. But to our relief still saved and uploaded the data once recharged.

We had a wonderful day and would definitely recommend using the NPMS app! It was easy to use and did not get soggy, as paper recording forms would have done in the showers. Enjoy surveying and do try out the NPMS app!



## Further volunteer opportunities: *What else is out there at the moment for botanical volunteers?*

- ❖ **The Plantlife Building Resilience in South West Woodlands** team have created a short video [Here](#) to help you identify trees this winter by looking at winter twigs. Wherever you are in the UK you should be able to find some of these common species. They are also running online training on how to survey and identify woodland species of moss, lichen and ferns– Visit their [Facebook page](#) to find out about the latest sessions.
- ❖ **The BSBI New Year Plant Hunt 2021** is going ahead! 1<sup>st</sup>-4<sup>th</sup> January. Find out how to follow and take part in the hunt [Here](#).
- ❖ **For keen gardeners, [Plant Alert](#)** is a citizen science project helping other gardeners and protecting the countryside by warning about invasive plants before they become a problem.
- ❖ **For anyone interested in fungi or developing your fungi ID**, Plantlife have launched [WaxcApp](#) Helping to map areas where grassland fungi are found. You don't need any experience; the App simply asks you to enter what colours of fungi you can see. Great fun fungi hunting for all the family! The above link also takes you to a colourful interactive map to see results so far.

Please ensure that your current email address and home address is up to date within your NPMS account, in order to make sure you receive news and updates from the scheme and any recording forms or materials requiring posting. You can do this by visiting "My Account" once logged in to our web page [www.npms.org.uk](http://www.npms.org.uk) and simply selecting "edit". Thank you.

## Contacts:

Keep up to date with training events and volunteer resources, as well as updating your data by visiting [www.npms.org.uk](http://www.npms.org.uk)

If you have questions about any aspect of the scheme or would simply like some more advice then please email [support@npms.org.uk](mailto:support@npms.org.uk) or phone: **07711 922098**

You can also see updates, news and join in the conversation by following us on:

Twitter – [@theNPMS](#)

Facebook – [National Plant Monitoring Scheme](#)

You are also invited to join a closed Facebook group of registered NPMS volunteers and mentors: [NPMS Support](#). This is a friendly point of contact between volunteers and a space for sharing survey experiences. You can now also find us on Instagram - [@the\\_npms](#)

## Acknowledgements:

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