Newsletter - Summer 2019

Welcome to the 2019 National Plant Monitoring Scheme Summer newsletter! 2018 was a busy year for the Scheme volunteers, as they continued to survey in the UK countryside through the fourth field season since the scheme's launch. It was a year of transition for the scheme with the completion of the second phase of the programme and funding secured for the third phase, which we have entered. The 2019 season has been a pivotal and exciting period for the scheme, with new training courses, updated guidance, partnerships and has marked the 5th year of data collection. This offers the emergence of trends in the important data collected nationwide. This Newsletter is a real celebration of our volunteers and partners: the efforts and contributions that make the scheme possible. Also plenty of news about how we've used your feedback this year and to shape our plans for the years ahead.

Introduction

Spring kicked off this season with a woodland themed launch, celebrating 100 years of the Forestry commission and asking what are our nation's wildflowers telling us?

Initial findings from woodlands surveyed as part of the NPMS and efforts of hundreds of volunteers nationwide, indicated that invasive, non-native Himalayan balsam is reported more frequently than native wild flowers such as bugle, ramsons and woodruff. Bluebells were the most frequently seen wild flower in woodlands surveyed. Other iconic native woodland species regularly spotted included greater stitchwort and yellow archangel. Some of the UK's top pollinator food species were recorded including honeysuckle and red campion. Though, just five species make up almost half the records: nettle, bramble, cleavers, hogweed and cow parsley. These are the dominant species in our woodland habitats, and are often associated with nitrogen pollution and undermanagement. But this is just a hint at the fascinating news coming out of the scheme. You can read more about the good and the bad news gleaned from an initial exploration



Hyacinthoides non-scripta - Bluebells

Andrew Gagg, Plantlife



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THIS ISSUE:

❖ What are the nation's wildflowers telling us?

from the first four years of woodland data here.

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NPMS Data in 2018

In 2018 data was submitted for over 900 visits to over 400 1km squares by volunteers. This is consistent with efforts in 2017, despite the extremely dry conditions reported by many of our surveyors. The NPMS database now contains information on over 3600 plots nationwide! The number of unique monads with associated data has risen to 806 (730 in 2018). 671 new volunteers registered with the scheme and 277 squares were allocated in 2018. See below for how we are getting on so far this year. This is an impressive effort, establishing the NPMS as an important program of nationwide botanical species data at small scales. The most frequently recorded habitats in 2018 were within broadleaved woodland, hedges and scrub, closely followed by lowland grassland; both are well represented in the scheme. The least frequently recorded habitats however were within native pinewood and juniper scrub and also upland grasslands. We are hopeful that 2019 data submission will show increases in surveys in these habitats. By a large margin, the most frequently recorded species in 2018 was the Common nettle, followed by Bramble and Cleavers. Some of the rarer finds recorded in 2018 include moonwort (Botrychium lunaria) and the white helleborine (Cephalanthera damasonium). We are now looking forward to seeing 2019 data, which has already started coming in.

Introduction to the new Volunteer manager

Thank you for your warm welcome, from Dr Rachel Murphy

I was thrilled to be appointed as the new NPMS volunteer manager early this year. Recent months have been a whirlwind, and I've enjoyed getting to know the scheme and its dedicated volunteers, preparing and overseeing this season, our fab training series and putting in place some of the updates and recommendations from your feedback last year (see below).

Prior to this I spent 5 years as Conservation Science Manager for MARINElife, a marine conservation charity where I coordinated and reported on a number of volunteer research programmes, including nationwide ferry surveys and small boat programmes, providing monitoring evidence to inform policy and conservation management decisions. So I'm a real advocate of the value of citizen science and volunteer data for long-term monitoring. With the right methodologies, guidance and training, citizen scientists can make an important contribution to both society and scientific understanding, along with increasing public engagement and community pride in local natural history. Before my role at MARINElife I studied for my PhD in Population and Community ecology at Leeds University, studying the behavioural ecology of Seabirds.

I'm now very much enjoying bringing my experience in citizen science and volunteer management, along with survey design to this role, and getting stuck in to this exciting and impressive scheme.



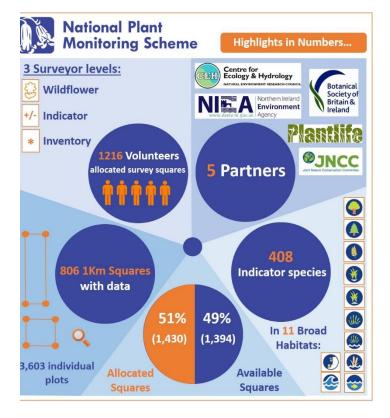
You can read a full interview with Rachel here.

Did you see...

...our highlights in numbers, published in March this year based on 2018 data? Just since January this year 1296 volunteers have joined our ranks, requesting to survey 266 squares altogether. All these volunteers are joining a friendly community of volunteers, contributing to our understanding of species abundance and distribution, along with habitat health nationwide.

Let's make 2019 our best year yet with more data submissions than ever before! Submit your data for this season online now. Feel free to contact

<u>support@npms.org.uk</u> if you need any advice on this



NPMS Training events: 2019

Our NPMS training events kicked off with a bang this spring/summer season. These have included a great variety, from introductions to the scheme and survey methodology to species and habitat workshops. In total thus far, we have run 32 courses in 12 regions, from the Cairngorms to Kent. We have reached over 250 participants looking to learn more about the scheme, develop their methodological and botany skills or simply meet other like-minded volunteers in their area. We have enjoyed working with new as well as existing training partners and very much look forward to receiving feedback from course participants and planning our training series for next year. All course participants will be sent a survey to complete at the end of the season.

You can see the full list of events run this year <u>here</u>, and this will also be where to find next year's courses, advertised in early 2020.

You've told us...

Below are just two messages we have received from course participants this season:

"The day was well worth the journey and time. I learned quite a bit, not only in surveying methodology but also in the use of GPS devices to accurately locate survey points. Dr Moore is a very good teacher." - Cassy McCleave on our Broadleaved woodland ID course in West Scotland

"Very informative and enjoyable time on the training event at Cree Valley, where we set up a plot in a beautiful woodland setting."

 Catherine Bell on a course on methodology in Newton Stewart.

Regional example...

A view from the Yorkshire Dales National Park: Mark Hewitt - YDNPA Wildlife Conservation Officer

The Yorkshire Dales National Park Authority through its Wildlife Conservation Team is in our second year of acting as the regional co-ordinator for the NPMS in the Yorkshire Dales.

This year we had six 'workshops' to deliver and we developed the programme based on feedback from participants on last year's courses.

Workshops have been spread through the year from April to September and have covered the following; Start of season get together and introduction to the NPMS, River and Woodland, Grasses ID, Mid-season review and feedback, Upland Habitats and an End of season review & feedback including data entry.

Our role is an evolving one based on our own experiences, feedback from participants and feedback from Rachel at the NPMS.

We have taken the approach to provide a range of workshops that are a mix of ID skills, habitat assessment, the practical application of the NPMS process and opportunities for feedback both on the workshops and the scheme itself.

I'm glad to say that feedback has been positive on the content of the workshops and there will be more in 2020.

Importantly, from the regional co-ordination perspective, we are exploring with the NPMS what this should look like in the Yorkshire Dales area with the emphasis very much on encouraging the uptake of squares and providing support to volunteers.

Your images...

Below are just some of the images our volunteers have shared with us, taken during training courses:



Above Richard Moyse leads a training walk at Ranscombe Nature Reserve. Image courtesy of Emma Brambley



Getting up close: IDing plants of heathlands & upland grasslands course in, Caernarvonshire, from Louise Marsh



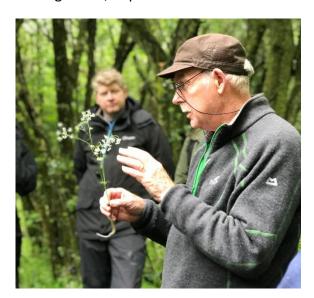
Training begins on the Pewsey Downs Chalk Landscape. Image courtesy of Christopher Millet

Regional example...

NPMS volunteer training in Northern Ireland: Lorna Somerville

Following the 2018 survey season, data was returned for 58 Northern Irish squares out of 144 allocated. Despite initial interest in taking part in the scheme, volunteers were found to be restricted from completing the process and submitting data. A survey was developed to understand what barriers were possibly holding volunteers back. It was found there was a need for more plant ID training; A desire for a volunteer network with a buddy system - a sense of belonging to a group. Further training on methodology and classification were also needed.

Together CEDaR and NIEA developed a training programme to develop botanical ID skills, with the help of local trainer Bob Davidson. Bob advised an ongoing training programme, visiting a different habitat each month, over 6 months. This format provided volunteers with an opportunity to develop their skills over a longer period than one off session would have allowed. Through visiting different habitats, the concepts of indicator species and habitat classification became familiar. We organised locations across Northern Ireland with public access in different regions, engaging with local organisations to promote the NPMS and involved property staff with training. On site staff provided site information which led to discussion of management, impacts and threats to habitats.



We have been pleased with the training series in the 2019 season and look forward to an active program in 2020.

More of your images in the field...



Lousewort, Pedicularis sylvatica recorded by Tim Purches on his second visit to his Dartmoor square this season



Frog orchid seen at Pewsey Downs, Wiltshire by Elizabeth Dixon



Upland Botany plus bonus species, painted ladies spotted by Pete Martin during his survey of The Band, Cumbria

Thank you!

On behalf of the NPMS partners, thank you for your feedback provided in the volunteers' questionnaire last year. Also for the feedback given by training course participants and trainers, as well as our mentors and regional partners. This is incredibly important to our assessment of your experience and survey design. Some of the themes in your replies:

Training:

- Both Field ID and Introductory training sessions are popular. People feel motivated and inspired following these sessions.
- People enjoy meeting up with others and want more opportunity to do so.
- Training has helped people to develop their skills and in some cases progress through the surveyor levels.
- More time and more opportunity to have field sessions both setting up plots and carrying out surveys, as well as focussing on ID would be welcomed.

Surveys and general:

- More guidance on habitat ID would be welcome.
- Further clarity on deciding on and setting up survey plots.
- High satisfaction levels 30% new to recording
- Volunteers are motivated and gaining in confidence for wildflowers.
- Surveyors welcome the opportunity to be out more, know more about local area and build new skills and interests.
- Website and data entry updates.

What we have done:

Your responses and perspectives have been incredibly helpful in shaping our activities for 2019 so far. Below are some ways in which we have used this feedback.

Additional training sessions on methodology and recording

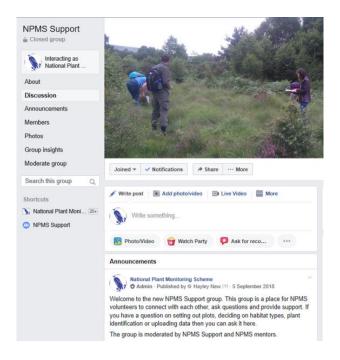
This season we added a number of training courses across the country that focused on survey methodology and practiced setting up plots in the field. This was well received with participants reporting greater confidence to survey their own plots. We plan to continue with these sessions next season.

What we have done continued:

NPMS support group – join, share and support

The NPMS Support Facebook group was set up in Autumn last year. This has proved to be popular, tripling in members since the start of this season, with lively discussion between volunteers and good queries from surveyors. Thanks ever so much if you are already part of this group and have contributed.

If you are not yet a member you can join here.



Habitats guidance

Habitat ID was one area our volunteers recognised the need for more support. Updated survey guidance notes have been printed that provide a more detailed habitats appendix, including images. These will be distributed to new volunteers joining the scheme. These updated guidance notes can be freely found on our resources page online, here.



Also, within the new print materials, symbols representing the 11 broad scale habitat types included in the scheme have also been added to each species within the species identification guide book to denote the habitat(s) in which they are recorded. While the guide book remains to show the same species list, the updated book is also available online here.



Improving the NPMS website and data entry interface

This year has seen an update to our NPMS webpage, in order to give it a friendlier appearance and make it easier to navigate and use.



Development of NPMS mentor scheme

This year we are looking to increased our mentor coverage, so that there is greater support offered in more regions. So far we have already added 5 mentors to our <u>list</u> this season, from Wiltshire to SW Scotland. See the mentors section below for further plans and to become involved.

A picture paints a thousand words!

Kevin Walker, BSBI

We all know the saying 'a picture paints a thousand words' - well it's the same in ecology and NPMS provides a magnificent opportunity to visualise vegetation changes that have taken place over time.

Take this pair of photos below looking across at Knocking Hoe National Nature Reserve in Bedfordshire, which is arguably the finest piece of chalk grassland in the UK, and home to numerous rarities including Pasqueflower, Burnt orchid, Moon carrot, Field fleawort, and Autumn's ladies-tresses.

The first photo on top shows the 'hoe' as it was in 1923 and the one below was taken in 2006. The overall impression is one of little change but if you look more closely you can see that the grassland was much harder grazed in the 1920s (as the flock of sheep indicates) with noticeably less scrub on its slopes. Also look at the remarkable trees in the hedgerows beyond. These are English Elms (*Ulmus procera*), possibly 30-40 m tall, which had all but disappeared from the landscape (at least as tall trees) by the end of the century.





With time photos of NPMS plots will hopefully paint an equally compelling picture of change so please remember to take some photos of your plots. Who knows what they will tell us 80 years hence!

NPMS Mentors

NPMS volunteer mentors, make such an important contribution to the scheme, supporting the team and offering more regional support to volunteers, providing option to call upon a more experienced volunteer. We know our volunteer surveyors appreciate this and we think our mentor group plays a big part in helping to create a volunteer community feel, something we are keen to further build on towards the end of this year and into next season. We are eager that our dedicated volunteers do not feel they are carrying out their surveys in isolation, but that they are part of a bigger group and there are others to talk to if needed.

If you're interested in becoming a volunteer mentor please contact support@npms.org.uk for further information. 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.

James Brunton-Smith, NPMS Mentor in North-Eastern England

My survey square is an exposed heather moorland in the Teesdale Valley, County Durham accessed via farmland and fields of rather intimidating young cows most years. In spite of this I relish the solitude and freedom it gives me to sit quietly and take a moment to myself in the wilderness. Visiting twice a year has really opened my eyes to the diversity of this habitat type and I am now very focused on the small changes occurring. This year I have been very keen to see whether the Roundleaved Sundews close to my survey plots are extending their range.



A curious onlooker watches on as James completes his NPMS surveys.

I have been an NPMS volunteer for 4 years now and more recently took up the role as a mentor for the NE region, being a part of the scheme has given me such satisfaction and an overwhelming feeling that I am contributing to a greater good. Being a mentor is a real privilege and I hope that I am able to help in a small way to build confidence in fellow volunteers and I am very keen to develop a local network of like-minded environmentalists.



Plans for the NPMS mentor programme:

Since receiving volunteer feedback towards the end of last year, we have been developing the support materials for NPMS mentors, the training that is provided and the types of support that they offer to other volunteers. We are now starting to put these into place and we do have a small budget to support regional mentor activities and new initiatives. Examples of ideas we have received so far include site visits end of season reviews/get-togethers, more social volunteer meets and mentor training. We are now exploring these options with our regional mentors. So please do feel free to feedback any ideas to your regional mentor found here, or to support@npms.org.uk.

As a volunteer position, any mentorship provided is dependent on the availability of our mentors.



NPMS Volunteer perspective:

We welcome news and stories from your plot and love sharing your experiences with other volunteers and getting to know you. Here are examples of volunteers working to collect valuable NPMS data:

Janet Gregory, volunteer in Lincolnshire:

"I have been a volunteer for NPMS for 5 years, having previously done a survey for Plantlife in a different kilometre square, and I wished to continue this citizen science. My 5 plots include a linear wet woodland area, 2 grassland areas, one on top of a slope grazed by cattle, and one situated beside a stream, grazed by sheep. The other 2 are linear, one beside a hedge and the other a field margin. It is interesting to see how these areas have changed over the years, mainly as a result of farming practices, especially this year when the farmer had sprayed his grassland with herbicide leading to a considerable reduction in diversity."

And an example of two of our volunteers working together to collect their data and share the effort:

Gordon Waterhouse and Fiona Van Es, volunteers in Devon:

"I was a primary school teacher, now long retired. I met Fiona when we both helped run a Wildlife Watch Club for children and since then we have helped each other on several natural history projects. Working together on our squares suits us very well; we can share recording and measuring tasks, chat about our finds and about the beauty of a spring morning.

We began our plots at the start of NPMS, in 2015. We have two squares, about a mile apart and we do them alternate years, so we have variety. In each square we have some woodland plots, some meadow, some marsh but I think our favourite plots are those along our Devon hedgerows. As the weeks pass, the commonest plants give us a coloured kaleidoscope: celandine, primrose, stitchwort and violet, red campion, bluebell and foxglove. We also have less common plants, like the beautiful but unassuming Town Hall Clock (Adoxa moschatellina).

I have done many bird surveys over the years but the advantage of NPMS is that flowers do not get up and fly away."

NPMS NEWS:

Study on the design, launch and assessment of the National Plant Monitoring Scheme now published!

The origins of the NPMS date back to workshops held in 2007 and 2008, when the Joint Nature Conservation Committee were considering the most pressing terrestrial evidence needs for conservation over the coming years. One conclusion from this work was the need for more up-to-date information on plant communities in semi-natural habitats. This conclusion set the ball rolling for the development of the NPMS. The BSBI, Plantlife, and CEH published an initial review of the topic in 2010 as JNCC report 440 "Designing a new plant surveillance scheme for the UK", and following this several years of small field trials gradually came to a head towards the end of 2013, when the bulk of the development work for the NPMS was commissioned. 2014 was really the crunch year when it came to scheme design, and a huge amount of work selecting species, defining habitats, and putting forward various sampling schemes to be tested by statisticians and in the field was all completed just in time for the launch in 2015.

The new paper reports on these decision making processes, as well as describing the many ways in which we used the pre-launch year of 2014 to consult, and to test our ideas in the field, with as many volunteers as possible. These were drawn from the earlier Wildflowers Count scheme, and from the ranks of the BSBI. These volunteers played an essential role in making sure our choices would to stand up to the test of woodland, moor and field, and we hope that this newly published paper, and the existence of our scheme 5 years hence, is a fitting tribute to their efforts. Needless to say, all remaining infelicities are doubtless our responsibility! The paper is freely available to all now here.

Data uses:

National Plant Monitoring Scheme data are increasingly being considered and used by national conservation agencies for monitoring habitats and species across the UK. Recent developments include the use of NPMS plot habitat classifications for training and validating land cover classifications created used remote sensing data in both England and Northern Ireland. Work has also been gathering steam on the use of NPMS species data for the creation of a national habitat indicator, one of the initial motivations for developing the scheme. See here for a technical report on this work to date.

The NPMS dataset is published annually on the NERC Environmental information Data Centre, with the species records also flowing to the NBN regularly.

See the 'Data' section here for links to all of these resources. Finally, a wide-ranging review of the data collected under the first two years of the scheme (2015-16), alongside reports on a number of other technical uses to which the NPMS data could be put in support of UK habitat and species conservation, is due to be published as a technical report of the Joint Nature Conservation Committee, one of the NPMS partners. This report will appear here soon.

New squares/monads released

At the start of this season, a new cohort of 108 NPMS squares was released and ready for allocation across the country. Some of these have already been allocated, so if you are interested in taking on a new square, check our squares map to find out if any squares have become available in your area.

Back from Brink - Citizen science event

NPMS volunteers are citizen scientists!

Earlier this year, volunteer manager Rachel Murphy was at Bournemouth Natural Science Society with the Back from the Brink and <u>Dorset's Heathland Heart</u> team for a public debate about people and wildlife. Where she sat on the panel to debate "what's next for citizen science?" and advocating the tremendous role our volunteers play.

Scottish Parliament

As one of our partners, Plantlife Scotland were at the Scottish Parliament event this summer, celebrating and promoting citizen science in Scotland. This included celebrating the great efforts of the NPMS Volunteers!



NPMS App

Following some previous technical issues with our NPMS mobile App, these have now been resolved and the App is available to update (or indeed download if you don't have it yet) for both <u>Apple</u> and <u>Android</u>!

A great way to get your data into us!



Engaged research YouTube interview:

One of our project partners, the CEH have recently created a series of short videos showcasing their core capabilities in public engagement. This includes the great work of the NPMS and the volunteers involved.

Watch the YouTube video <u>"Engaged research: How we work with citizen scientists to learn more about nature?"</u> featuring Dr Oli Pescott.

We need you!

Input your data:

If you haven't already, now is the time to input your data from this season. This in needed by 31st October in order to be included in the analyses of this year's data.

Previous season's data — it's not too late!

If you still have data from previous year's that have not yet been submitted, this 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 your data, contact support@npms.org.uk.

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. 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.

Quality Assurance field trials:

Quality assurance is important at every stage of a project. It is a means of reviewing the programme and ensuring that quality and experience of activities are carried out to best practice. We will be carrying out a series of methodology field trials in the south west of England next season and are therefore looking for volunteers from each surveyor level, able to participate for just 1 or 2 days in addition to their own surveys. If you think you may be interested and available, please contact support@npms.org.uk for further information.

Plot profiles – share your experience

At the end of this survey season, we will be restarting our monthly plot portraits <u>blog</u>, to help us get to know other volunteers in the scheme. If you think you would like to share your experience of your plot and you have an interesting story to tell, just get in touch with <u>support@npms.org.uk</u>.

Further opportunities and links for NPMS Volunteers:

Identiplant:

This is a distance learning course on botanical ID. Full fee is usually £300, but again in 2020 there is a concessionary fee of £100 for NPMS volunteers. You can find out all about the course here. The application form for the start next February will open on this site on 1st December.

Identification booklets:

Following the success of the Start to Identify Grasses booklet from Wildflower study last year, there is now a booklet Start to Identify Sedges & Rushes. For those interested, these along with Pocket Guide to Wildflower Families are available on the website here.

Plant Identification App:

If you have a mobile device with App capability, the **Pl@ntNet** App comes a highly recommended to help identify plants with pictures. It can be downloaded for use on Apple or Android devices here.

Citizen Science research:

Our volunteers are invited to participate in an online survey by Kiel University (Germany) on the personal experiences of citizen science participants – that means YOUR experiences. It takes about 20 minutes.

Find the survey <u>here</u>. Along with more information about the study helping researchers to better understand what participants get out of their involvement in citizen science projects. This will help researchers to develop projects that they are better tailored to the needs of their participants. Projects that involve volunteers in scientific research go by many different names. In this survey, the term 'citizen science' is used.

You must be 18 years or older to participate in this survey. Responses needed by the end of this month.

Contacts:

Keep up to date with training events and volunteer resources, as well as updating your data by visiting 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

or phone: **07711 922098** Landline: **(01722) 342730**

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

Twitter - @theNPMS

Facebook - <u>National Plant Monitoring Scheme</u>

You are also invited to join a closed Facebook group of registered NPMS volunteers: <u>NPMS Support</u>. This is a friendly point of contact between volunteers and a space for sharing survey experiences.

You can now also find us on Instagram - <a>@the npms

Also visit the blog on our web page to view the most recent blog posts from the scheme.

Acknowledgements:

The NPMS partners would like to take this opportunity to thank all of the stakeholders that both organised and/or attended workshops in England, Wales, Scotland and N. Ireland and have supported the NPMS in recent years. Including, The Cairngorms National Park, The Yorkshire Dales, National Park, the South West Scotland Environment Information Centre, Taylor Wildlife, the Cumbria Biodiversity Data Centre, Snowdonia Society and the Species Recovery Trust. The Field Studies Council, Brenda Harold, SNH, Natural England, National Trust and the MOD have also provided much valued assistance in numerous ways. Thanks also to Andrew van Breda and Karolis Kazlauskis for technical support.

Also a huge thank you for the effort by all our dedicated volunteer surveyors that make the programme possible and a lively community to be part of.

Thank you to all the contributors of the newsletter and to those that supplied images.













