



# National Plant Monitoring Scheme

Monitoring our wild flowers

## Newsletter - Spring 2017

### Welcome

Welcome back to the National Plant Monitoring Scheme newsletter! The scheme continued to grow in 2016, with both new volunteers and an impressive proportion of volunteers resurveying their plots from year one. In this edition we also report on some of the research uses of NPMS data, the 2016 participants' survey, our partnerships with other conservation organisations, and more stories from your NPMS days out!

### Introduction

Surveyor enthusiasm throughout 2016 continued to overwhelm us, and we hope that we have kept pace with all of your questions, data submissions and requests! Last year we were able to make squares available across the UK to around 200 surveyors on our waiting list, which is another great stride forward for our survey.



Follow us on Twitter [@theNPMS](#) to help spread the word

Find us on 

### Participation in 2016

As of the end of 2016, around 1300 squares were allocated to surveyors, with data received for around 600 of these. The number of plots for which data was received totalled around 1600, again producing an excellent cross-section of the status of plant communities across the UK. Over the winter we also contacted

inactive surveyors, many of whom were automatically allocated squares during the transition from Wildflowers Count to the NPMS. This exercise allowed us to provide squares to many surveyors who had expressed interest in participating last year. We welcome all new surveyors to the scheme!



*Dry calcareous grassland. Photo: © Nadine Mitschunas*

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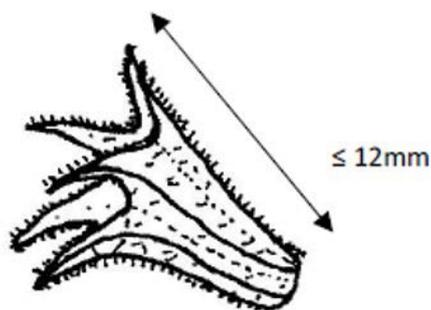
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## Website resources

As you may have noticed we added many new resources to the website in 2016, including additional 'cribs' to some difficult species groups, such as ferns, and tables linking NPMS habitats to those in the recent (and highly recommended) *Britain's Habitats* book (ISBN 978-0-691-15855-6). One of this book's authors, Sophie Lake, is also an NPMS volunteer, and we are fortunate to have an article on her squares on page 7.

We have also added a new 'Conservation and Research' section on the website, which will increasingly contain copies of NPMS research reports, as well as more technical information on habitat correspondences. Last year, in fact, saw the first research use of NPMS data: NPMS plots were used to investigate changes in habitats since an earlier national habitat survey (the 2007 CEH Countryside Survey). Reports on this work will be made available on the NPMS website when they are finalised.



*Yellow Archangel calyx from the new 'crib' © Nick Law*

## What's new in 2017?

The NPMS website now allows for the upload of photos supporting your records. These photos will flow with your records to the iRecord ([www.brc.ac.uk/irecord](http://www.brc.ac.uk/irecord)) system for expert verification – so, if you have any doubts about an ID, make sure you take some good photos! Once records are expert-verified, they will be included in the NPMS datasets on the new National Biodiversity Network Atlas ([nbnatlas.org](http://nbnatlas.org)). The complete NPMS dataset is also available at the CEH Environmental Information Data Centre, ensuring its wide availability to all researchers.



*Close up photos help with ID! Photo: © F. Pescott*

Our 19 NPMS Mentors will continue to answer your queries this season, as will our staff in the office (including plant photos), so take a look at the 'Resources' page of the website to find out how to get in touch if you need a bit of support or encouragement tackling your square.

## Training

2016 saw 28 training workshops delivered to 269 volunteers, on topics ranging from the NPMS methodology to more in depth looks at grasses and sedges. At least 23 workshops are currently planned for 2017, and these are available for registration on the website now! Last year you told us that you wanted more habitat identification workshops, so look out for these in particular. Visit [www.npms.org.uk](http://www.npms.org.uk) and login to book.



*NPMS training. Photo: © Hayley New*

## NPMS volunteers in 2016

Towards the end of 2016 we asked you to provide your feedback through our participants' questionnaire. An amazing 634 of you responded, giving us a valuable insight into our pool of volunteers and enabling us to use your feedback to shape the delivery of the scheme in 2017 and all other years to come.

We were thrilled with the commitment from you, with 61% of those who had carried out a survey having done so in both 2015 and 2016. We were equally impressed with the time you spend out in the field (average 3-5 hours per visit), highlighting the great level of care taken in following the methodology and completing the survey.

Lots of you told us that you were keen gardeners and walkers, and we were really excited to hear that 30% of respondents were new to biological recording – it's great to have you on board!

The participants' survey also asked volunteers what benefits they felt they had gained whilst taking part in the NPMS. Many people feel that they have gained a new skill (76%), become more interested in wildflowers (49%), and learnt more about their local environment (67%). It would be great to hear from you if you also feel you have met new people, and are feeling part of a new community, as these are certainly benefits that we hope more volunteers will be feeling as the scheme grows.

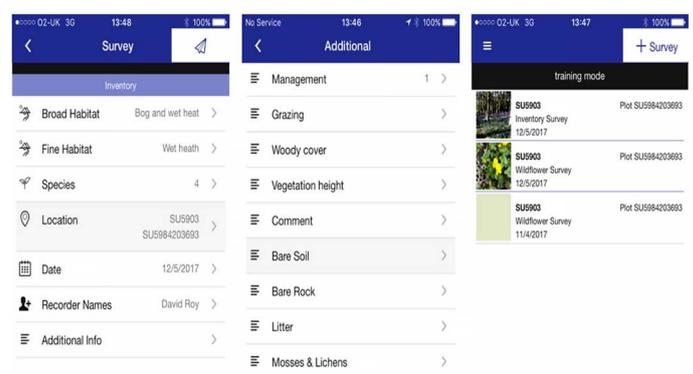
Over the past two years, 83 NPMS volunteers have signed up for the 'Identiplant' course (<http://identiplant.co.uk/plant2015wp/>). The course costs £100 for an NPMS volunteer (as opposed to the £300 non-volunteer rate), and takes a year to complete. The number of NPMS volunteers participating in Identiplant suggests a real commitment to improving botanical knowledge, and to the scheme. Further details about taking part in 2018 will be on the website later in the year.

Please continue to provide your feedback to us, either through our occasional surveys or by emailing the NPMS coordinator, as it plays a vital role in ensuring the continuing success of the scheme.

## Smartphone App for the NPMS!

We continually look to improve the NPMS, and have therefore developed a Smartphone App for entering data to the scheme.

The App is available for both Android and Apple devices and links to your NPMS website account. This means that you can record against plots that you have already created on the website. For example, you can enter your sample information such as date recorded, habitat type and associated information, plus the species seen and their abundance whilst in the field.



*NPMS app screenshots*

The App works in an offline mode (e.g. for use in remote areas without a mobile phone signal) whereby your data is stored on the phone, to then be uploaded at a later time (e.g. when you are connected to wifi).

We are looking for volunteers to test the App in the field so please contact [support@npms.org.uk](mailto:support@npms.org.uk) to get involved.



*Horseshoe Vetch. Photo: © L. Hulmes*

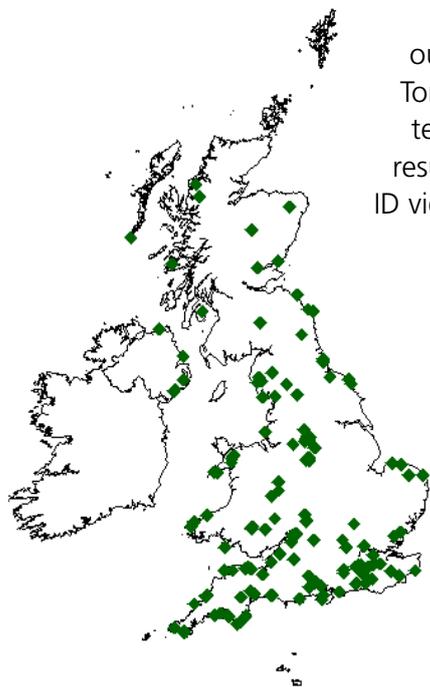
## Making the most of our connections – improving scheme sustainability

Over the past two years we have been developing partnerships with a number of landowning organisations and letting them know about any overlap of NPMS squares with their land. One of the most enthusiastic partners has been the National Trust, who have a significant overlap of 152 squares.

The National Trust have made a commitment to work with their staff and volunteers to get all of these squares surveyed. They are also now looking to use the NPMS methodology to monitor their sites on a broader scale. This will hopefully enable them, in the longer-term, to create their own indicator to compare alongside the national statistics that the NPMS aims to produce.

Having the National Trust adopting the squares on their land will help increase the sustainability of the scheme, and we are exploring ways of improving the accuracy of NPMS data by having all of the National Trust's plots GPS-located.

The NPMS team (CEH, BSBI, JNCC & Plantlife) have held two workshops to date, one in England and one in Wales, to explore these types of options with other organisations and stakeholders. These have been very well attended and have provided us with lots of positive feedback and options to explore in the future – watch this space!



*NPMS squares overlapping with NT land*

We have continued our work with the FSC Tomorrow's Biodiversity team in 2016 and as a result three new habitat ID videos are in their final stages of production – dry heathland, dry acid grassland and neutral pastures and meadows. They will be available via the NPMS website soon!

## NPMS-linked training in Northern Ireland

The Centre for Environmental Data and Recording (CEDaR), based within the National Museums, is the Local Biological Records Centre for Northern Ireland (NI). CEDaR has been operational since 1995, enjoying a productive partnership with the NI Environment Agency and the local recording community, facilitating numerous recording projects. CEDaR has been a key supporter of the NPMS in NI since its launch, with staff and volunteers now surveying 22 squares. CEDaR has also been developing a training programme focusing on species and habitats. Courses encourage recording of under-recorded groups, support projects, initiatives and events, and provide support for specific recording schemes, such as the NPMS.



*2016 Aquatic Plants Training Course, Portmore Lough*

CEDaR works in partnership with National Schemes and Societies and key experts to deliver training. Tutors bring a huge wealth of passion and knowledge, and are keen to help new recorders gain valuable field expertise, providing advice on survey methodology, how to work through keys, using appropriate equipment and resources. Through these training courses the local recording community has grown in strength and capacity, with links being made between groups, information shared about conservation projects and species trends discussed.

*CEDaR training supporting the NPMS in 2017.*  
See: <http://www.nmni.com/CEDaR/Training>

Title	Date
Grassland habitats	9 June
Umbellifers (Apiaceae)	7 July
Rushes	2 August
Ferns	13 September

## Going anywhere nice for your holidays? Recording NPMS squares in remote areas.

by Kevin Walker

The results of the first two years of NPMS have shown that some habitats have been much less well recorded than others, especially in the remoter parts of Wales, northern England and Scotland (see table on the next page).

The reason for this is very simple. There are very few botanists resident in these areas. One way to remedy this is to record a square in an area where you frequently holiday. I do this on the Hebridean Island of Colonsay which I visit annually to record the flora of the island. Admittedly this is a busman's holiday but there is an NPMS square within half a kilometre of the farmhouse we stay in so I spend a morning recording the plots that I originally set up in 2015. These include the shore of a peaty lochan, some wet and dry heathland and some coastal shingle at the head of a beach.

The plots and the surrounding vegetation support some superb vegetation and lots of interesting species such as the diminutive Lesser Twayblade (*Neottia cordata*) amongst the heather, Lesser Marshwort (*Apium inundatum*) in the pool, Bearberry (*Arctostaphylos uva-ursi*) on the rocky knolls and Saltmarsh Flat-sedge (*Blysmus rufus*) along the shoreline.

Looking at the map of NPMS squares on the website I see that there are lots of unallocated squares in heavily visited places such as the Yorkshire Dales National Park. I'm sure there are NPMS volunteers who regularly holiday in these areas, so if you feel like some holiday botany, then please sign up for a square. You never know what you might find!



*Lesser Twayblade (Neottia cordata)*  
at Loch Breac, Colonsay  
(© Pete Stroh)



*View of an NPMS square on the southwest coast of Colonsay*

Counts of annual surveys of plots (2015/16 combined) at different levels

NPMS fine-scale habitat	Wildflower	Indicator	Inventory
Acid fens, mires and springs	17	30	22
Arable field margins	62	104	76
Base-rich fens, mires and springs	3	11	28
Blanket bog	6	18	20
Coastal saltmarsh	4	24	25
Coastal sand dunes	12	7	29
Coastal vegetated shingle	6	35	21
Dry acid grassland	21	23	41
Dry calcareous grassland	53	60	60
Dry deciduous woodland	126	158	167
Dry heathland	61	71	35
Hedgerows of native species	128	200	164
Inland rocks and scree	5	19	14
Maritime cliffs and slopes	12	27	5
Montane acid grassland	10	5	33
Montane calcareous grassland	2	1	5
Montane dry heathland	3	7	5
Montane rocks and scree	6	4	7
Native conifer woods and juniper scrub	15	7	10
Neutral damp grassland	30	55	60
Neutral pastures and meadows	97	105	161
Nutrient-poor lakes and ponds	12	15	7
Nutrient-rich lakes and ponds	9	20	41
Raised bog	0	0	3
Rivers and streams	16	28	37
Wet heath	25	41	27
Wet woodland	25	27	32

## More surveyor tales...

We have continued to receive many entertaining stories from volunteers – thank you to all of you who have taken the time to write in with your tales. One volunteer, Sinead Mulvaney from Northern Ireland, contacted us with the following piece, which demonstrates considerable resolve in accessing a tricky square, and fits in nicely with our article on the developing relationships between the NPMS and other conservation organisations:

“I was late trying to find a NPMS square to call my own. I logged onto the website and found the ‘Squares near me’ option. As I looked at the map most of the squares near me were already allocated. But a blue square stood out in the map as one lonely unallocated square surrounded by a sea of allocated ones. Then I realised why, it was surrounded by the sea! An island on Strangford Lough in Northern Ireland - Island Taggart on the west side of the lough in fact, owned and managed by the National Trust.

“Thankfully I have my trusty sea kayak and my partner agreed to take on the square too so I wouldn’t be alone. National Trust were more than accommodating, allowing us free access over the island. So, with no issues, we launched our kayaks on a glorious summer’s day in June and paddled up the lough. With barely a ripple on the water, the sun on our backs and seals accompanying us, this was definitely the way to spend an afternoon.

For a small island I was worried about finding enough habitats, but I needn’t have been concerned. From strandline and saltmarsh, to hedgerows and species-rich grassland, the island was a joy. I am looking forward to many return visits to my square in the sea!”



Have kayak, will travel! The view from Island Taggart

## Exploring new ground

### Volunteer Sophie Lake tells us about the joys of her NPMS squares

“Shouldn’t we turn off here? Look, there’s the way up...or we could go and see the tarns first...what do you mean we’re not going on up? ....why would you want to go down THERE?!” My 10 year old son, lover of hilltops and disdainful of less challenging terrain is dismayed to realise that I meant it when I said that today we’re not going up. To be honest, I’d been keen to do the square nearer the summit too but, pipped to the post, have settled for one lower down. In any case it is nearer where we are staying at my parents’ house, and so we have been able to walk straight from the door.

A mile or so more, and we start to descend gradually, until we are looking out over my new NPMS monitoring square - a tucked away corner of blanket bog called Langshaw Moss on the northern flank of Wherside in the Yorkshire Dales. This unassuming boggy patch forms the watershed for a lovely craggy gill that skitters away down to the valley bottom through a steep-sided limestone woodland and a couple of traditional hay meadows before flowing down into the underground cascades and caverns of the River Dee below.

The bog looks a little uninteresting at first, but the Curlews skirling overhead soon gladden our hearts and we pause a while to figure out how to locate our plots without disturbing the waders. We take a long way round to avoid them and find a lovely patch of mire, all colourful sphagnums, for our first plot. Landmarks are few and far between, so we take a GPS reading and line up a corner of the plot with a gate in a stone wall on the near horizon, and the end of Artengill viaduct on the far horizon. Four hours later we’ve done all of our plots – a bit of dry heath, an area of heathy acid grassland near the gill, some blanket bog, and a surprise find – a sinuous calcareous flush picked out with brown mosses and

almost hidden in thick rushes. And a new species for my son – the pretty turned-back pink petals of Cranberry (*Vaccinium oxycoccos*). To be honest, he is still more interested in the summit, but we head down.

Back home in Dorset, I set out to relocate my plots from the previous year on Hartland Moor, alone this time. Mostly this is fine, but I’m glad of my original sketch maps when I’m floundering around among thigh-high tussocks of Purple Moor-grass (*Molinia caerulea*) trying to orientate myself. Perhaps it wasn’t such a clever idea to choose a stream running through the centre of a mire for my linear plot – but one of the pleasures of doing this kind of surveying is that it takes you to places you wouldn’t normally think to visit.

So this year, we’re taking on another square as a collaborative effort at work. Our office is in Wareham Forest near Morden Bog, where there happens to be a square covering a bit of genuine, ancient bog woodland (or so we’ve heard). It’s too good a chance to miss, so we’ve scheduled in some survey visits after our monthly team meetings, wellies obligatory...



Sophie's linear plot on Hartland Moor, Dorset

E-mail: [support@npms.org.uk](mailto:support@npms.org.uk)

[www.npms.org.uk](http://www.npms.org.uk)

We would like to take this opportunity to thank all of the stakeholders that attended workshops in England and Wales and have supported the NPMS in 2016. The Field Studies Council, Richard Burkmar, Charlie Bell, Nick Law, Andrew van Breda, Karolis Kazlauskis, Brenda Harold and parish councils across England and Wales have also provided much valued assistance in numerous ways.