National Plant Monitoring Scheme

ANNUAL REPORT 2024

NPMS TEN YEARS AMONG THE WILDFLOWERS

10

Introduction

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ANNUAL REPORT 2024

As the foundations and building blocks of terrestrial habitats, plants have the power to transform our landscapes. It is therefore vital to understand and monitor their abundance, diversity, and how their communities are changing—both to understand habitat change itself, but also to appreciate how this might affect the many other species they support. Data from the National Plant Monitoring scheme (NPMS) are being used to provide insights into the health and trends in semi-natural terrestrial habitats across the UK. Such surveillance programs are crucial for understanding how our landscapes and species are responding to growing environmental pressures.

Development of the scheme began in 2012, with the first full survey season completed in 2015. This makes the 2025 season the 10 year anniversary of the NPMS, the largest continuous volunteer-based plant monitoring scheme of its kind. This large scale and systematic approach would not be possible without the dedication and support of our many talented volunteers, heading out to survey their allocated survey squares twice a year. Monitoring NPMS habitat plots regularly provides an unparalleled opportunity to track and understand the responses of plants to our changing environment, and therefore helps to inform policy and conservation activities. Not only that, but it also provides us with an opportunity to thrive and become better connected to nature!

10 National Plant Monitoring Scheme
CELEBRATING **10 YEARS** AMONG THE WILDFLOWERS

Contents

National Plant Monitoring Scheme

npms.org.uk

Highlights in Numbers

© Ian Hamilton

◀ Starry saxifrage (*Saxifraga stellaris L.*) recorded by volunteer Ian Hamilton, within his South Aberdeenshire square

Total Number of volunteers with squares
1,542

Total number of squares with data
1,270

Total number of squares allocated
1,593

Total number of plots with data
5,143

Number of surveys
8,031

Number of records
251,878

Number of species/species groups recorded
1,742

Overall ▲

© Ava Marley

In 2024 ▼

Number of surveys conducted
630

▲ Sea aster (*Aster tripolium*) observed by volunteer Ava Marley

Number of records in 2024
18,849

Number of plots with data
1,182

▲ Volunteer Helen Fry, completing her final late summer survey, 2024

▼ Sea holly (*Eryngium maritimum*) recorded Wendy Rumsey, within her coastal vegetated shingle plot, Kent

Number of squares with data
270

Number of species/species groups recorded
## 916

© Wendy Rumsey

Highlights in Numbers

© Sarah Shuttleworth

There are 2,884 NPMS survey monads (1 km² squares) nationwide. At the end of 2024, 55% (1,593) of these monads were allocated to volunteer surveyors, with more surveyors adding to the volunteer pool almost every day. NPMS survey monads are randomly generated, weighted for the semi-natural habitats the scheme is investigating and to minimize surveyor selection bias. When 70% of the survey monads are allocated within a region, more monads are released from the available pool.

Squares can also be released by volunteers no longer able to survey them. These monads already have survey plots, ready to be adopted by new volunteers in the area for consistent long-term monitoring of the same sites.
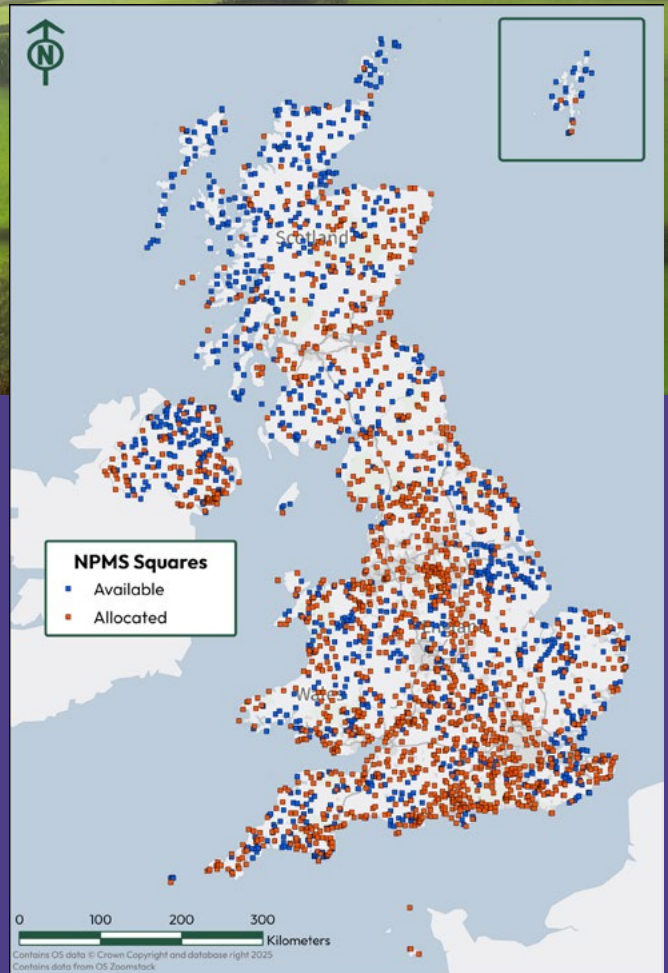
NPMS Squares
- Available
- Allocated

Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

NPMS survey monads across the UK, January 2025.

| Highlights per country	England	Scotland	Wales	N. Ireland
Total number of squares with data	857	196	119	98
Number of surveys overall	6,063	1,290	795	302
Number of records overall	174,678	40,522	25,437	8,567
Number of species/species groups recorded overall	1,530	858	814	468
Number of squares with data submitted in 2024	207	40	25	26
Number of plots with data submitted in 2024	794	169	97	85
Number of surveys conducted in 2024	463	99	52	40
Number of records in 2024	12,650	5,185	3,189	1,447
Number of species/species groups recorded in 2024	781	351	365	266

Highlights in Numbers

Within the scheme, there are now over 1,270 1 km squares nationwide, for which survey data has been captured.

Indeed, the number of squares for which data has been submitted for multiple years is increasing.
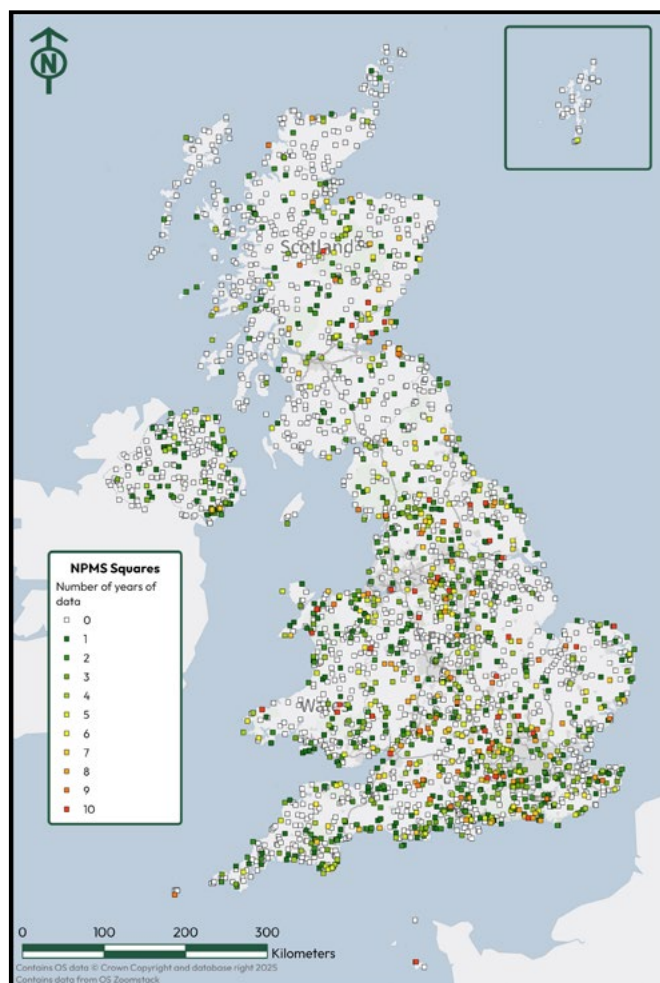
© Ava Marley

▲ Sea Purslane, Atriplex portulacoides

Number of squares with data returns for a given number of years:

No. Years surveyed	1	2	3	4	5	6	7	8	9	10
No. Squares	347	227	140	109	71	50	50	35	37	36
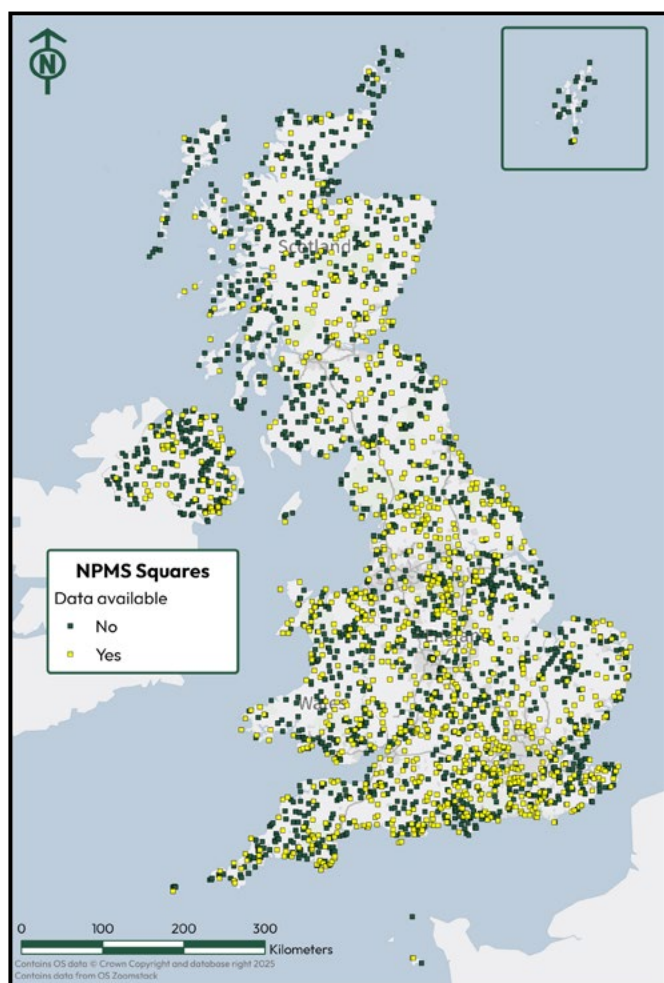
NPMS survey monads with associated data across the UK, January 2025

NPMS survey monads across the UK with number of years data, January 2025

Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

Celebrating 10 years of the NPMS

In spring 2015, the National Plant Monitoring Scheme launched its first full field season, bringing volunteers and scientists together to better understand the UKs wild plants and their habitats. Since 2015, the NPMS has grown to include over **5,000 plots** around the UK being monitored by well over **1,000 volunteers**, creating over **250,000 records** to contribute to the government's national Biodiversity Indicators, along with over 300 other studies and applications.

2010

Designing a new plant surveillance scheme for the UK

Project group investigates and develops 'ideal' design of a UK vascular plant monitoring scheme that complements other species and habitat monitoring in increasing understanding the state of the UK environment.

2011 – 2014

Scheme development and pilot phase

The scheme and methodology was co-developed during an extensive and inclusive trial phase with experts, contributors and volunteers from a variety of backgrounds

2015

Launch of the NPMS

The first full field season as the National Plant Monitoring Scheme as it is today.

2016

NPMS expands to Northern Ireland

Supported by the Department for Agriculture, Environment and Rural Affairs N.I. (DAERA).

Department of
Agriculture, Environment
and Rural Affairs
www.daera-ni.gov.uk

2017

Over 5,000 volunteers registered with the NPMS

2018

NPMS gets a survey mobile App

Designed for in-field data capture.

Over 10,000 NPMS plot samples recorded

2019

Understanding the health of our habitats report

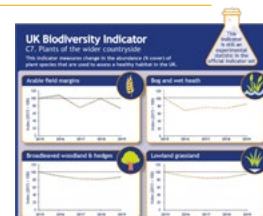Stories start to emerge from the data following the 5th season of surveys.

2020

NPMS Training expands online

Online training and meets enabled volunteers to remain connected during the Covid pandemic.

NPMS data contributes to the Defra/JNCC UK Biodiversity indicators

Specifically, NPMS data from four of the scheme's most surveyed broad habitats are used to create a new experimental indicator for category C7 "Plants of the wider countryside".

2021

NPMS+ Pilot

The NPMS+ pilot project began, to explore the potential for using protocols from the NPMS at a local level.

NPMS 2021 Annual Report

The first of the NPMS Annual reports was produced.

2022

First NPMS EDI review

To inform scheme activities, volunteer support and developing NPMS Equality, Diversity and Inclusion (EDI) strategy.

Over 1,000 squares with data returns

2023

Additional in-field and desk-based volunteer roles created

As part of efforts to improve scheme accessibility and offer further opportunities to get involved.

**Assessing the exposure of UK habitats to Climate change**

Climate exposure research published using NPMS volunteer data and assessing its representation with other ecological monitoring schemes.

2024

Indicator species trends visualisations

Species trends launched on the NPMS website to showcase current trends. View annual abundance estimates for any positive or negative indicator species within a broad-scale NPMS habitat.

Over 250,000 botanical records submitted
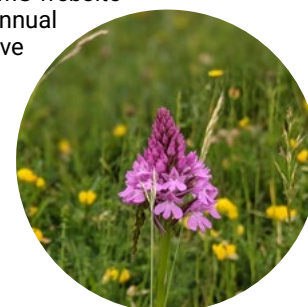
2025

⭐ 10 year anniversary! ⭐

Celebrating 10 years of the National Plant monitoring scheme

10 years of the NPMS

National Plant Monitoring Scheme

CELEBRATING **10 YEARS** AMONG THE WILDFLOWERS

The success of the scheme thus far, and the building of this valuable long-term dataset, is only possible thanks to the tremendous dedication and effort of the NPMS volunteers. We are excited and grateful to welcome new surveyors and desk-based volunteers to our friendly volunteer community every year, each bringing their own skills and enthusiasm. As we celebrate the 10th anniversary of the NPMS, some of the scheme volunteers that have been with us since the very beginning reflect on their experience with the NPMS.

We'll be celebrating 10 years of the NPMS throughout the year with the many volunteers and stakeholders, who also support and promote the NPMS. We're also looking forward to seeing you again in the field to kick off another decade of fantastic data collection! Find out more about our celebration plans on page 17.

Andrew Chadwick

Andrew has been monitoring the same square for ten years, on the south bank of the Humber, not far from the confluence of the rivers Ouse and Trent. The square is mostly arable farmland and his plot habitats are arable field margins, a hedgerow, and a meadow, along with a large freshwater pond, originally used for irrigation. Over the years Andrew has completed 229 plot surveys comprising ~1,500 species records—a mighty contribution!

"I saw the original article about the scheme through Plantlife and thought it looked interesting. I was already a member of a local natural history society, so I was familiar with recognising basic plants. The fact that the scheme could be undertaken by beginners was reassuring.

The scheme has been an incentive to improve my identification skills as it forces you to look closely at species that you might otherwise turn a blind eye to because they are a bit more difficult. I started recording at the indicator level but as my confidence increased, I moved to the inventory level. Over the years I have also gained more respect for the survival skills of plants. My arable plots are wiped clean every year, yet the plants reappear the following season.

Although the arable plots tend to yield the usual suspects, there have been surprises when recording. Common Fumitory appeared quite abundant in one plot only to dwindle away the following year. Corn Spurrey also made a brief appearance.

The plot along the pond margin has got richer every year with species including Water-plantain, Gypsywort, Common Spike-rush and Amphibious Bistort establishing themselves. The hedgerow and pond plots have so far not been managed in any way and, looking back at earlier pictures of the plots, it is apparent how much things have grown."

▼ Growth in Andrew's pond plot vegetation through time. Images show the plot in 2015, 2020 and 2023

2015

2020

2023

© Andrew Chadwick

10 years of the NPMS

Stephanie Witham

Survey volunteer Stephanie has also been monitoring the same NPMS square on the North Norfolk coast since the first NPMS season in 2015. Her allocated square is on the top of some steep cliffs with the Norfolk coast path running along the edge. A beautiful but quite tricky location, as some of the square is actually under the sea and the cliffs are not accessible owing to erosion. So the safe and surveyable area within the square is a bit reduced. The land is mainly agricultural, but includes a small deciduous wood and a short hedgerow, as well as the narrow areas of grassland towards the cliffs.

"I became involved with the NPMS as I saw a piece in a magazine when it first started. It said that previous botanical knowledge was not essential. I had recently retired, so thought it would be an ideal project to learn something and get out in the fresh air. I found that a bit more knowledge than I had would be helpful, so I completed the Identiplant course when that was first offered. I have learnt quite a lot over the last 10 years and have made friends and contacts who I can turn to for advice when needed. I always enjoy going out to my square, but try to avoid going when it's windy!

The cliffs here are known for Common Spotted Orchid, but typically I've only once found one in my most likely patch of grassland! I used to enjoy the Kidney Vetch along the cliff edges, but haven't found any for the past 2 years as I think most of it has disappeared over the edge. The main difference I've observed over the last 10 years is the cliff edge crumbling away. This has been caused by water draining down the land as well as direct action from the sea."

▼ View's from Stephanie's square on the north Norfolk coast

© Stephanie Witham

10 years of the NPMS

Christopher Millet

Based in Gloucester, Chris started out with one survey square in 2015, which overlapped both the Cotswold Commons and Beechwoods National Nature Reserve and the National Trust Ebworth Estate. Chris took on another square the following year that includes a farm on the Guiting Estate. In 2021 Chris added a third square, also in the Cotswolds, before finally broadening his patch and adopting a square in the Brecon Beacons in 2022.

Since joining the NPMS 10 years ago, Chris has completed an incredible 231 surveys across his squares at the wildflower level, amassing over 1,000 indicator species records.

Chris has enjoyed recording change in his squares over time, which vary in habitat type from broadleaved woodland to calcareous grasslands, riverside bogs and montane slopes.

"I've had an interest in all thing's flora and fauna from a young age and spent some time at teacher training college on the North Downs surveying the chalk hills, so there has always been a dormant interest. 10 years ago I joined the NPMS motivated by the opportunity to increase my knowledge of flora.

At the time I was working as an adviser to a holiday walking company, so this was also an opportunity to increase my knowledge, including completing the Identiplant course. Through participating in the NPMS I have also gained more opportunities to be outdoors, particularly in woodlands, which is good for my wellbeing and also improves the immune system.

A recording highlight has been at Bemborough farm. Here the farmers work with nature when farming near water courses. The discovery of 'opposite leaved golden saxifrage' beside the River Windrush was a good indication that the water is clean and field run off has been contained. At Ebworth, two of the fields were reseeded with a calcareous seed mix 10 years ago and are now maturing into a mutliplant habitat.

Over the 10 years I have observed increasing biodiversity in some of my squares, particularly on the Bembough Farm site. I appreciate the hard work farmers are carrying out while growing food."

▼ Chris' montane slope plot in the Brecon Beacons

▼ Chris Millet, Woodland plot

▼ Chris Millet, Arable plot

Digging into NPMS data 2: Abundance profiles of heathland indicator species

Oli Pescott, UKCEH

In the second instalment of this occasional series, we look at the abundance profiles of heathland positive indicators recorded over the last ten years.

Heathland within the NPMS is divided into Dry heathland and Dry montane heathland. As described in the Survey Guidance Notes, Dry heathlands develop on free-draining acid sands, gravels and other superficial substrates (e.g. china clay) in the lowlands (<300 m) and on thin acidic peats and mineral soils on acidic rocks in the uplands (300–700 m), although they are also found down to sea-level in northern and western Scotland. Some authors divide these two altitudinal categories into lowland and upland dry heath (e.g. see the NPMS correspondence table to the *Britain's Habitats* book by Sophie Lake et al.) The NPMS Dry montane heathland category then corresponds best to the montane dwarf-shrub heath of Lake and coauthors, and this is generally found on stony acidic and well-drained soils above the potential altitudinal limit of woodland at around 600 m. Gradations between Dry montane heathland and peri-montane forms of Dry heathland will of course occur, with the former typically having smaller and/or more prostrate forms of the typical dwarf shrub species such as Heather, Bell Heather and Crowberry. Regardless of precise classifications, heathlands in general are extremely abundant across the UK, and, especially in the lowlands where the losses have been the greatest, represent a community of high conservation importance.
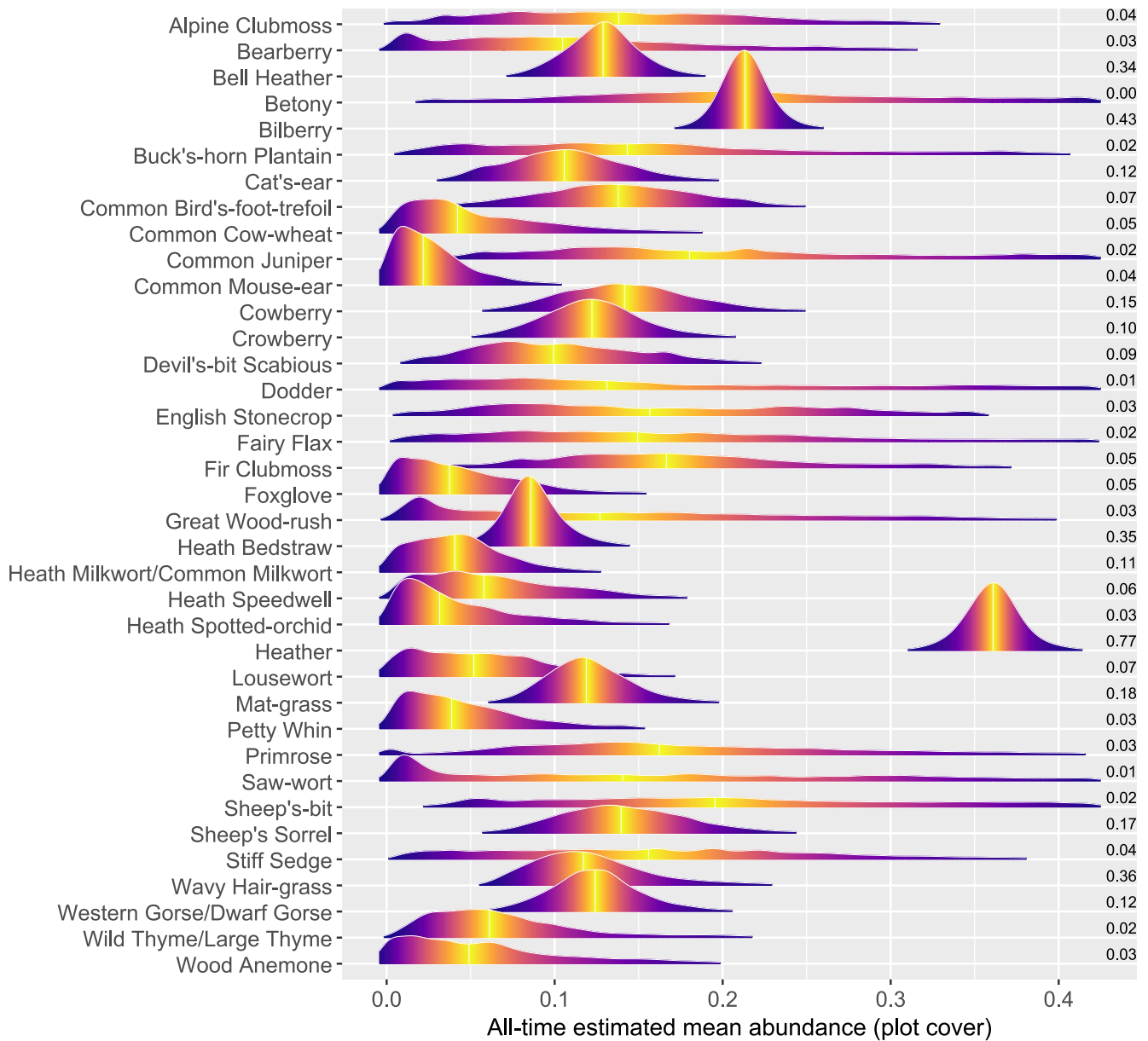
The National Plant Monitoring Scheme annual trends track the average abundance of a species across plots recorded in a certain habitat type; these measures include absences (i.e. zeros). In this way the trends (and indicators based on them) allow for the expansion or contraction of habitats across our landscapes, as well as responding to increases and decreases in abundance where a species already occurs. However, because such measures tend to be dominated by the fact that many species are absent from most plots in the scheme (i.e. there are many zeroes), focusing in on species' "abundances-when-present" can provide more intuitive insights into species' ecologies. The graph accompanying this article does this for the scheme's Heathland broad habitat grouping (i.e. Dry heathland plus Dry montane heathland). The distributions shown for each species depict the spread of our estimates of mean annual abundance across all Heathland plots in the NPMS for the period 2015–2024. Mean abundance here is given as plot cover on the proportion scale (i.e. 0–1), although we have limited the x-axis of the plot to ~0.45 (i.e. ~45%), because most species' mean covers are considerably below this point. The numbers on the right of the plot also give species' overall observed plot frequencies for the same period, revealing a loose correlation between species' frequencies and their in-plot abundances (the frequency of 0.00 for Betony is the result of rounding: the species has only been recorded in two of 385 NPMS Heathland plots for the period). Species' mean abundances here are estimated from the statistical model used for the annual trends; the colours used for the distributions essentially try to depict their "peakiness", with central white lines indicating the middle (i.e. median) of the estimated distribution. The plot frequency numbers given on the right-hand side are simply those observed in the raw data, as for the two out of 385 example already given for Betony.

© Rachel Murphy

Data and Research

Graph of species' abundances when-present for the NPMS Heathland broad habitat grouping for the period 2015-2024

Species	Value
Alpine Clubmoss	0.04
Bearberry	0.03
Bell Heather	0.34
Betony	0.00
Bilberry	0.43
Buck's-horn Plantain	0.02
Cat's-ear	0.12
Common Bird's-foot-trefoil	0.07
Common Cow-wheat	0.05
Common Juniper	0.02
Common Mouse-ear	0.04
Cowberry	0.15
Crowberry	0.10
Devil's-bit Scabious	0.09
Dodder	0.01
English Stonecrop	0.03
Fairy Flax	0.02
Fir Clubmoss	0.05
Foxglove	0.05
Great Wood-rush	0.03
Heath Bedstraw	0.35
Heath Milkwort/Common Milkwort	0.11
Heath Speedwell	0.06
Heath Spotted-orchid	0.03
Heather	0.77
Lousewort	0.07
Mat-grass	0.18
Petty Whin	0.03
Primrose	0.03
Saw-wort	0.01
Sheep's-bit	0.02
Sheep's Sorrel	0.17
Stiff Sedge	0.04
Wavy Hair-grass	0.36
Western Gorse/Dwarf Gorse	0.12
Wild Thyme/Large Thyme	0.02
Wood Anemone	0.03

All-time estimated mean abundance (plot cover)

© Rachel Murphy

Data and Research

The clearest distinction seen in this plot is the division between positive indicator species that are very common in the dataset and those which are rare (note that species that are rare in some subset of NPMS habitat plot data are not necessarily nationally rare at larger scales!) Species that are scarce in our data, and/or which have variable cover values associated with them, have much flatter, broader estimated mean cover distributions. This is essentially because we have relatively little information with which to work. Examples include Alpine Clubmoss, Betony, Buck's-horn Plantain, Common Juniper, Dodder, English Stonecrop, Fairy Flax, Great Wood-rush, Primrose, Saw-wort, Sheep's-bit and Stiff Sedge. The largest occupied plot frequency across these species is 0.04 (Alpine Clubmoss and Stiff Sedge); these two plants are associated with Dry montane heathland, and the plot samples vary in their recorded covers between <1% and 35–50% (Alpine Clubmoss, 12 non-zero samples) and between <1% and 11–25% (Stiff Sedge, 9 non-zero samples). This makes it difficult for the model to be confident in a mean cover, and these could be situations where the use of additional information from other quadrat datasets or surveys could be useful.

The most confident mean estimates are for those dwarf- or sub-shrub species that typically dominate the biomass in heathland habitats: Bell Heather (*Erica cinerea*), Bilberry (*Vaccinium myrtillus*), Cowberry (*Vaccinium vitis-idaea*), Crowberry (*Empetrum nigrum*), Heather (*Calluna vulgaris*) and Western Gorse/Dwarf Gorse (*Ulex gallii/minor*) being the main suspects. Broad-leaved herbs such as Common Mouse-ear (*Cerastium fontanum*), Heath Bedstraw (*Galium saxatile*) and Sheep's Sorrel (*Rumex acetosella*) are also well-estimated,

as is the Mat-grass (*Nardus stricta*) and the Wavy Hair-grass (*Deschampsia*, now *Avenella*, *flexuosa*). The mean cover estimates for these plants are broadly in line with the Domin cover scores given within the National Vegetation Classification, although these are often given as very broad ranges, and the NPMS summary presented here averages across up to 22 NVC communities. In terms of their time-trends, many of these taxa appear to be quite stable at the small scales of the NPMS plots, even where they have declined nationally over the past 30 years or so. For example, Wavy Hair-grass appears roughly stable from NPMS data, whereas the 10 x 10 km effort-adjusted trend over the period 1987–2019 was recently estimated as strongly negative by *Plant Atlas 2020*. Of course, these results, at quite different spatio-temporal scales, are not necessarily unexpected, but they do demonstrate the complementarity of data collected and/or analysed at different scales.

As we noted previously, widely available estimates of species' mean abundances at the plot scale are largely lacking for the British and Irish floras, although the National Vegetation Classification books list the cover class ranges for numerous species in different plant communities (see this table for the NPMS to NVC equivalences). As well as helping us to understand year-to-year changes in plant populations and community compositions, such data and model outputs can also help us to understand the extent to which plants provide resources for insects, birds, and other animals. For example, linking such abundance profiles to plant traits can allow things such as the overall value of a community to pollinators to be estimated. The NPMS team are currently working on expanding our scheme outputs in this area.

© Rachel Murphy

Trail blazing National Plant Monitoring Scheme data incorporated into European-wide plant/pollinator monitoring initiatives

The health of Europe's wildflowers and their pollinators—e.g. bees, butterflies and hoverflies—is under mounting pressure from pollution, climate change and habitat loss. To track these shifts, standardised, plot-based surveys have become essential, providing reliable measures of plant and insect abundance over time. The UK's National Plant Monitoring Scheme (NPMS) stands out as a pioneering effort in this field, alongside programs in Switzerland, Spain and other countries.

In May 2024, researchers convened in Paris for a two-day symposium to compare existing monitoring schemes and explore ways to unite them into a coherent European network (see the accompanying graphic for an overview of the schemes represented). Their goals were to expand the number of plots and species monitored (including rare habitats), increase survey frequency, and integrate volunteer-collected data with commissioned studies. The workshop highlighted the need for clear, user-friendly protocols and training to ensure that volunteer observations feed smoothly into continental analyses, something in which the NPMS is considered a trailblazer.

For plants, six national or regional schemes launched since 2001 now regularly resurvey marked plots, revealing widespread declines in many species—but also surprising local recoveries linked to changing climates or land-use practices. NPMS volunteers have contributed key abundance data that feed into ReSurveyEurope, a database spanning much of the continent. These joint datasets can help scientists to detect trends at fine spatial scales, test how environmental drivers like nutrient enrichment affect communities, and assess the impact of policies on plant diversity.

Monitoring pollinators remains more challenging, given their greater species richness and identification difficulties. Outside of butterflies, systematic abundance data are scarce. Encouragingly, a standardised EU Pollinator Monitoring Scheme (EU-PoMS) is now under development, and the French "Spipoll" project harnesses thousands of volunteer photographs to document plant–pollinator interactions in urban and rural settings. Such initiatives show how citizen scientists can supply large-scale, high-resolution data on flower visitors.

Looking ahead, the workshop underscored opportunities for technological innovation—automated image-analysis tools, drones and AI-driven identification—alongside developing statistical frameworks that link heterogeneous data sources. With the EU's new Nature Restoration Law aiming to restore 20% of land by 2030, harmonised monitoring will be vital to track progress. NPMS volunteers will play a central role: your annual visits not only enrich UK datasets but also feed pan-European efforts, offering early warnings of declines and measuring the success of conservation actions across borders. Together, these efforts promise a clearer, continent-wide view of how plants and pollinators are responding to an ever-changing world.

See https://doi.org/10.1111/nph.20038 for the open access article summarising the meeting.

Data and Research
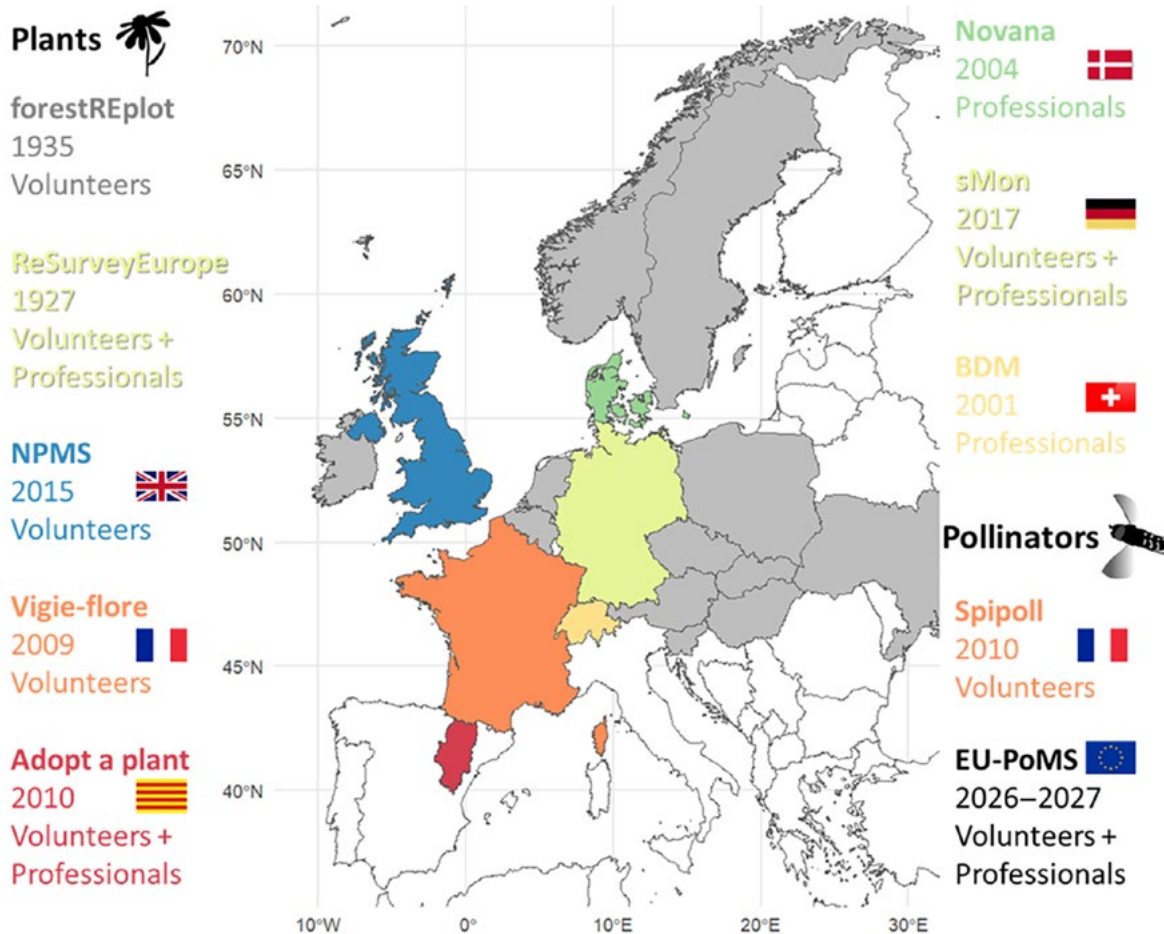
Existing or future monitoring schemes presented during the meeting. The information given for each scheme comprises the spatial coverage, launch year, and type of participants.

Species trend visualisations updated for 2024 now on the NPMS website!

In last year's Annual Report we announced the launch of our species trend viewer on the NPMS website (www.npms.org.uk/trends). These allow the viewer to inspect our current annual abundance estimates for all positive and negative habitat indicators at the broad-habitat level. We have now updated these to include the current estimates for 2024, and we hope to have more news on these later in the year—watch this space!
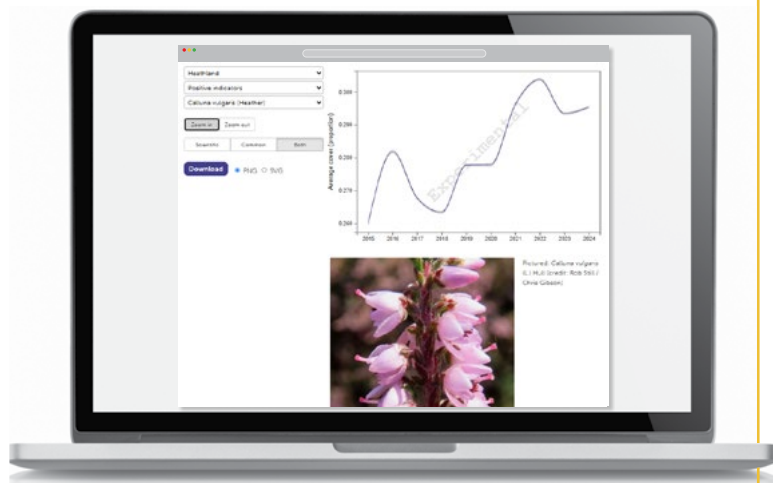
Volunteer engagement and training

NPMS Training 2024

2024 training and engagement events:

4 in-field training events

5 methodology and data entry online sessions

4 habitat and species-specific webinars

4 interactive online workshops

Total: 17

Most popular training 2024

Identifying native broadleaves in Autumn and winter

Surveyor training ▶

NPMS videos

NPMS videos shared in 2024: **7**

Total NPMS training videos available to view publicly: **60**

Video views 2024: **14,050**

Total views 2015-2024: **50,000**

All training webinars and videos have been made available to view any time on the NPMS YouTube Channel

▲ NPMS survey methods training, Three hagges Woodmeadow, Yorkshire

2024 training session attendance

393 Participants

◀ Grasslands species ID training, delivered by Budding Nature
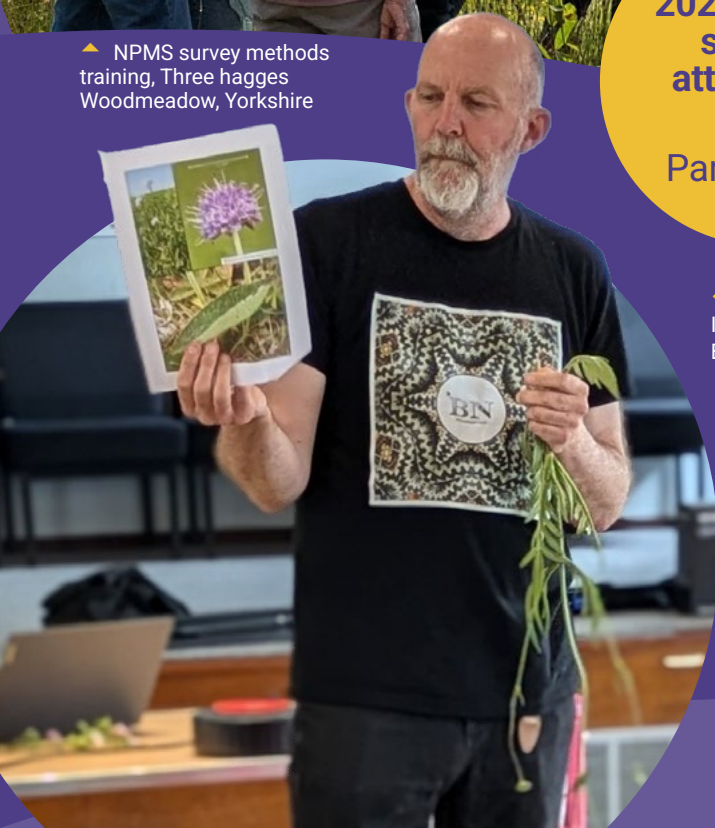
We have welcomed positive feedback through 2024 regarding the bi-annual NPMS Newsletter, within which we are committed to adding more volunteer voice and experiences, alongside our regular guidance, tips and news features.

Images © Rachel Murphy

NPMS NEWS

Anniversary celebrations

We will be celebrating the 10th anniversary of the NPMS all year, with local events popping up online and across the country through the summer (check out our Events and Webinars pages) and two big celebrations in October. These celebrations are about enjoying the UK's amazing plant life, and celebrating all the volunteers without whom the last 10 years would not have been possible!

In London we'll be hosting an event at UCL-East in Queen Elizabeth Olympic Park on **18th October**, and in Northern Ireland we'll be hosting an event at the Loch Neagh Discovery Centre in County

Armagh on **25th October**. Both of which will include a networking lunch (with food provided), a chance to hear from some of the country's finest botanists, volunteer awards, a botanical book sale, and more!

If you have any meaningful, fun, or beautiful photos or stories from your time as an NPMS volunteer, please send them to support@npms.org.uk. We're looking to highlight your experiences this October, and so would love to hear from you.

We will be sending out invites with full agendas shortly, so keep an eye out!

BSBI Northern Ireland Botanical Skills and Evidence Project: NPMS overview

Botanical skills officer Jen Farrar ran six events for NPMS volunteers in Northern Ireland, which were a combination of social meet-ups and habitat/plant ID training events including Hedgerows, Urban Woodlands, Dry Dune Heath, Meadows and wetlands and Upland Heath, reaching 27 participants.

The year ahead will have a selection of habitat and plant ID training days, plot set-up training, social meet-ups and, of course, the celebration of the 10th Anniversary of NPMS at the Lough Neagh Discovery Centre in October 2025.

◀ NPMS field training, Roe Valley, N. Ireland

NPMS News features

The BSBI Botanical Skills Project in Northern Ireland is also in the process of running pilot studies on aspects of adopting an NPMS square such as gaining permissions from landowners and promoting 'Pre-loved' Squares to current and potential NPMS volunteers.

▲ NPMS training meet, Binevenagh, N. Ireland

The BSBI in Northern Ireland have also welcomed a new member of staff to the team, Jo Mulholland, as a Training Officer for the Botanical Skills Project NI. Jo is an NPMS volunteer herself, and, along with Jen Farrar, will be instrumental in providing all aspects of training and social meet-ups throughout Northern Ireland over the next three years.

◀ Jo Mulholland

Working with landowners in Northern Ireland

Following discussions in 2024 with National Trust NI and RSPB NI, which have land and properties overlapping NPMS survey squares, Jen and Jo will be working with Ulster Wildlife and other landowners in Northern Ireland through 2025 to encourage the adoption of any NPMS squares on their properties. To date all discussions regarding NPMS squares have elicited a keenness to engage further and for staff training to be facilitated.

NPMS News features

New NPMS app launch

With thanks to funding from the Defra Natural Capital and Ecosystem Assessment program, 2024 saw the launch of the new joint NPMS and Plant Portal mobile app for in-field data entry.

This app can be used to submit data by both NPMS volunteers surveying their scheme plots, and also other recorders submitting monitoring data to the Plant portal. The newly designed app is available free for both Apple and Android devices

We would like to thank colleagues and volunteers involved in field testing the App before it's release. This "road test" proved to be extremely useful and their valuable feedback has helped us to update the app for an optimal user experience.
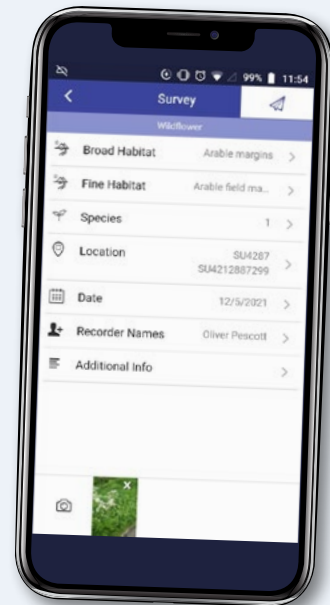
NPMS website development and updates

The NPMS team continually work to provide a smoother and more informative user and volunteer experience on the NPMS website. Throughout 2024, we have been excited to develop and launch additional tools and functionality in line with efforts to improve survey accessibility and provide volunteers with more information in preparation for their surveys.

NPMS Square and plot details

Existing or potential NPMS volunteers can now access and view improved information about the individual NPMS survey squares via the Square details page, before they request squares. When reviewing NPMS squares, it is now possible to view square specific summary details. This provides information on any overlapping major landowner boundaries and nature reserves. You can see if this square has been surveyed by a previous volunteer. If it has been surveyed before, you can see the plot locations, when it was surveyed and at what level. You can even see a summary of species previously recorded on a square and any associated images. All of this enables volunteers to make a more informed decision as to which square to adopt, as well as making square survey summaries more visible for both surveyors and interested landowners.

The NPMS team have also been working to develop additional map features and square accessibility details, such as elevation, road and rights of way networks, and public transport access points, which we are excited to launch in 2025.

▲ Square and plot details example

Improved facilitation of "buddying"

As a result of volunteer feedback and regular expressions of interest, we have recently developed the NPMS website and user accounts to aid volunteer buddying for those keen to link up with fellow volunteers in their area. "Buddying" refers to enabling contact with another local NPMS volunteer, whether to jointly conducting surveys, or share knowledge and tips, or simply benefiting from peer-to-peer support from other local volunteers.

Volunteers can now update their details to indicate whether they are potentially interested in linking with other volunteers. This indication of interest in "buddying" is managed by the volunteer and linked to your account via an optional check box. Only NPMS partner admin staff can see whether a volunteer has indicated interest in buddying, this is not visible to other volunteers. Contact details will never be shared without an express request to do so and permission from both volunteers. This new feature allows the NPMS support team to more quickly and efficiently support volunteers who approach them looking for opportunities for contact with fellow volunteers.

Linking with other volunteers for buddying and peer-support is a self-led activity managed by volunteers themselves. Volunteers indicating an interest in buddying can withdraw at any time by simply unselecting the check box on their account. All accounts are opted out of buddying by default until volunteers manually opt in.

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NPMS Square release survey

The NPMS is committed to continually improving the experience of the volunteers. As such, when a volunteer chooses to release a square they were previously allocated, they will now automatically be offered the chance to complete a short, anonymous square release survey. The responses provided will help inform our future work and how we support volunteers and maximise their experience as valuable contributors to the scheme.

NPMS Training events and Online resources

It is important that scheme volunteers are able to easily find and access the whole range of training opportunities and resources available to them. As such, following useful feedback, both the NPMS Training events page and Online resources page have seen a re-design and revamp. Updates improve user navigation and information display, making searching for and booking onto these opportunities an easier, more enjoyable experience.

Events planned for 2025 are already listed within both the events and public webinars pages, with more being added throughout the season. With an improved display and clearer learning themes on our resources page, we are looking forward to adding to these useful support materials through the coming year.
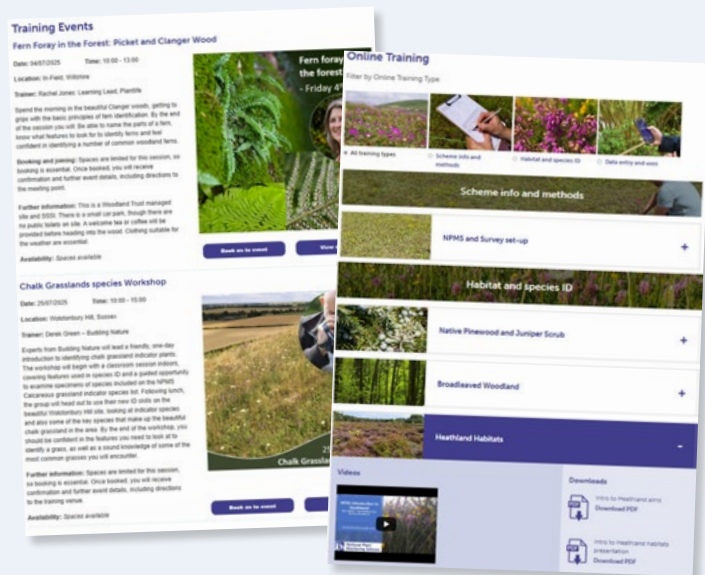
Nature for all

The NPMS and it's partner organisations are active members of the UK Terrestrial Evidence Partnership of Partnerships (UKTEPoP). This is a collaborative initiative, to strengthen and unify the efforts of organisations running biodiversity monitoring schemes and their volunteers across the UK.

This winter UKTEPoP partners published a joint statement – *Nature for all: diversity makes us stronger* – that pledges our commitment to diversity, equity and inclusion in species monitoring schemes in the UK. You can find the UKTePop statement HERE

Together we are building inclusive biodiversity monitoring schemes that reflect our society and strengthen our conservation efforts.

Thank you!

We offer our sincere thanks to the many dedicated NPMS volunteer surveyors, along with NPMS desk-based volunteers. Without their commitment and significant efforts over the last 10 years, the scheme and important research carried out would simply not be possible. Thank you to our incredibly knowledgeable trainers for their guidance and enthusiasm. Also thanks to the stakeholders who have supported the NPMS in recent years and have organised or attended workshops across the UK, including: The Department of Agriculture, Environment and Rural Affairs, Northern Ireland (DAERA-NI), National Trust, Natural England, Ministry of Defence, Chilterns AONB, Yorkshire Dales National Park, South West Scotland Environment Information Centre, Cornwall Wildlife Trust and Cairngorms National Park. Also, all the AONBs, National Parks, Record Centres and other organisations and individuals who have promoted and supported the scheme.

National Plant Monitoring Scheme

To discuss the scheme, how data are used or volunteer involvement, please contact support@npms.org.uk

Full list of NPMS publications:
www.npms.org.uk/content/conservation-and-research

www.npms.org.uk

07711 922098

Facebook: https://www.facebook.com/National-Plant-Monitoring-Scheme

X: @theNPMS

Instagram: @the_npms

NPMS App available to download for Apple: https://apple.co/2HTySPJ
and Android: http://bit.ly/2VkOdRf

Botanical Society of Britain & Ireland

JNCC

Plantlife

UK Centre for Ecology & Hydrology