National Plant Monitoring Scheme

Annual Report 2025

Long-term NPMS surveyor Chris Millet

National Plant Monitoring Scheme

CELEBRATING 10 YEARS AMONG THE WILDFLOWERS

Botanical Society of Britain & Ireland

JNCC

Plantlife

UKCEH

Introduction

By providing information on where and when species have been observed, biological surveyors contribute valuable data, to monitor national distributions and to inform conservation science and policy decisions. Ultimately helping to protect our treasured landscapes.

The National Plant Monitoring Scheme (NPMS) is a partnership project designed and coordinated by Plantlife, The UK Centre for Ecology and Hydrology (UKCEH), the Botanical Society of Britain and Ireland (BSBI) and funded by the Joint Nature Conservation Committee (JNCC). This large-scale scheme monitors diversity, abundance and changes in plant communities across habitats of the UK. Each year, hundreds of volunteers across the UK conduct botanical surveys at fixed locations within pre-determined 1km^2 squares, focussing on plant species indicative of habitat quality.

The dedication of volunteers makes this widespread and systematic approach possible, with increased effort and local expertise on the ground. This in turn supports the collection of quality data to enable analyses and trends. All while supporting learning and becoming better connected to nature.

Throughout 2025 the NPMS celebrated its 10-year anniversary, an exciting and significant milestone for the scheme, which signals that the hard work of NPMS volunteers and supporters is truly paying off.

Contents

Highlights in numbers 3
NPMS: Working in collaboration 5
Data and Research 11
Volunteer engagement and training 18
NPMS News 19

National Plant Monitoring Scheme

npms.org.uk

Highlights in Numbers

Lady fern *Athyrium filix-femina* recorded by BSBI Training officer Jo Mullholland

Total number of squares allocated
1,716

Total number of plots with data
5,360

Number of surveys overall
8,615

Number of records overall
269,617

Total number of squares with data
1,313

Number of species/species groups recorded overall
1,765

Bugle *Ajuga reptans* observed by volunteer Alexandre Gomes-Boga during his first NPMS survey season, Aberdeenshire

Surveyors in Northern Ireland record knapweed

Overall ▲

In 2025 ▼

Number of squares with data in 2025
243

Number of surveys conducted in 2025
560

Number of plots with data in 2025
1,088

Number of records in 2025
16,876

Teasel *Dipsacus fullonum* in flower, captured by volunteer Suzanne farmer

Number of species/ species groups recorded in 2025
872

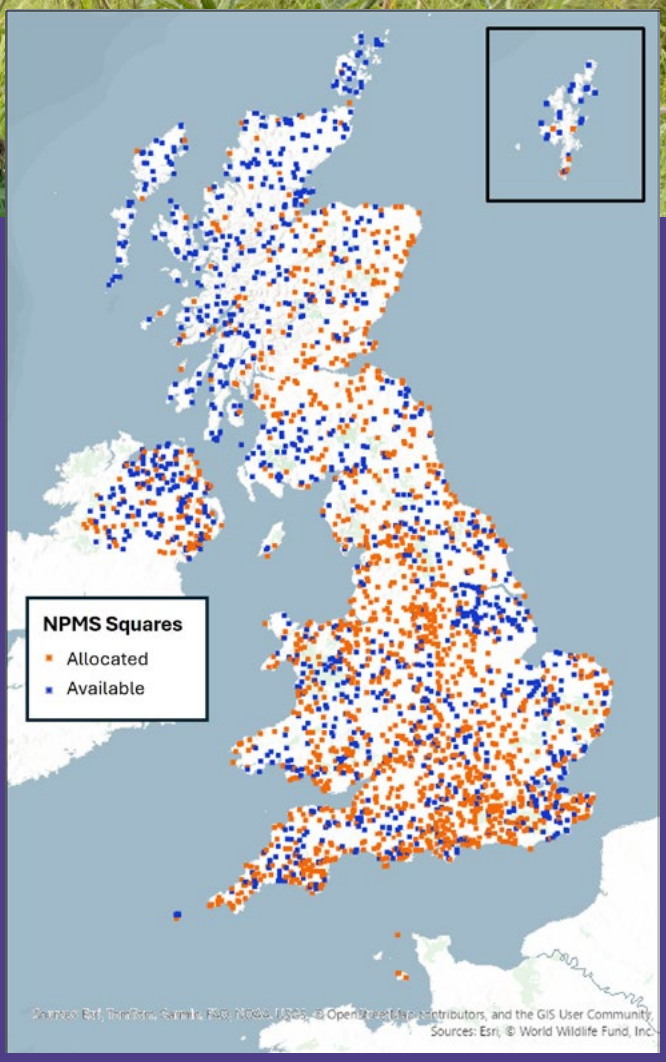
Highlights in Numbers

Knapweed by the sea, Rathlin

There are 2,884 NPMS survey monads (1 km^2 squares) nationwide. At the end of 2025, 60% (1,716) 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. There have been a number of these pre-established squares released through 2025 and re-allocated to new volunteers, or those simply looking for a change.

While the number of surveys completed annually remains steady, the number of squares with data attributed continues to grow, with 1,313 squares nationwide now with associated survey data. Nearly a quarter of these squares have NPMS survey data for 5 or more years.



NPMS survey monads across the UK, January 2026.

Highlights per country	England	Scotland	Wales	N. Ireland
Total number of squares with data	870	201	122	120
Number of surveys overall	6,474	1,389	843	345
Number of records overall	186,679	42,783	26,928	10,278
Number of species/species groups recorded overall	1,544	858	827	504
Number of squares with data submitted in 2025	173	34	20	25
Number of plots with data submitted in 2025	1,165	147	127	101
Number of surveys conducted in 2025	395	95	37	36
Number of records in 2025	11,343	5,185	3,189	1,447
Number of species/species groups recorded in 2025	732	315	301	254

NPMS: Working in collaboration

In order to coordinate, operate and achieve a monitoring programme at the scale of the National Plant Monitoring Scheme (NPMS), collaboration and partnership working are essential. Particularly as a programme that strives for inclusion and for botanical recording to be accessible to as wide an audience as possible. The NPMS 10th anniversary celebrations throughout 2025 highlighted the necessity of close collaboration with scheme partners, volunteers, stakeholders, data users, other monitoring schemes and wider supporters.

Here we explore examples of how the NPMS is working with others to develop and ultimately achieve outcomes greater than each could alone.

Scheme Partners

The National Plant Monitoring Scheme (NPMS) was designed and developed by the Botanical Society for Britain and Ireland (BSBI), the UK Centre for Ecology and Hydrology (UKCEH), Plantlife and the Joint Nature Conservation Committee (JNCC), which also provides the funding for the scheme. The JNCC is the public body that advises UK Government and devolved administrations on UK-wide and international nature conservation. The UK Centre for Ecology & Hydrology is an independent, not-for-profit research institute, carrying out environmental science across land, sea and air. The BSBI is an expert botanical society for anyone interested in the flora of Britain and Ireland. Plantlife is a conservation charity working to create lasting positive change for wildflowers, plants and fungi, and during the current funding phase, acts as the Secretariat of the partnership. In more recent years, the original four scheme partners have been supported by the Department for Agriculture, Environment and Rural Affairs N.I. (DAERA), with the scheme's expansion to Northern Ireland. The partners of the NPMS core management group work closely together all through the year, capitalising on the expertise and networks of each member, to deliver the scheme's strategic aims and ultimately robust, valuable data to contribute to UK biological monitoring.

> ***"Working alongside the NPMS management group offers a supportive and ambitious team of experts, all working towards a shared goal. Group members have clear roles and areas of delivery, while collaborating closely and complementing each other's contributions. I have found it to be an extremely dynamic and energetic partnership, both in delivering core scheme objectives, while also reviewing and evolving certain areas to meet new challenges, ways of working and reporting needs. We are also grateful for the support of the various members of the NPMS steering group, that has helped to evaluate and advise scheme activity over the last decade."***

Plantlife

Dr Rachel Murphy,
Plantlife volunteering manager

NPMS: Working in collaboration

Volunteers

Along with the NPMS management partners, the Scheme was co-developed with volunteers on the ground during an inclusive trial phase, with contributors and volunteers from a variety of backgrounds and experiences. It was and still is important that the scheme is accessible and inclusive, while maintaining robust and standardised methodology and data standards. Not only is the NPMS volunteer community the core and lifeblood of the scheme, conducting annual surveys and submitting their valuable data, but collaboration with and feedback from volunteers and supporters continues to shape and influence how the scheme is delivered. From the annual NPMS training programme to resource materials, scheme approaches are informed by the experiences and input from existing and interested participants. In recent years the pool of volunteer roles has expanded, and volunteer voice and experience has become ever more prominent across scheme communications.

> ***"I have improved my identification skills over the years, and this is one of the joys of being a volunteer. But as well as improving my ID skills, one of the other benefits of working on plant ID over the years has been my learning about the importance of land management in encouraging plants to flourish. The National Trust, who manage the land where my plots are, have made some important changes to my plots by adding fences, diverting and protecting paths, adding protective strips of woodland and protecting ponds. I've seen the return of two less common plant species which is very exciting.***

Linda Otten,
NPMS survey volunteer

© Jo Mullholland

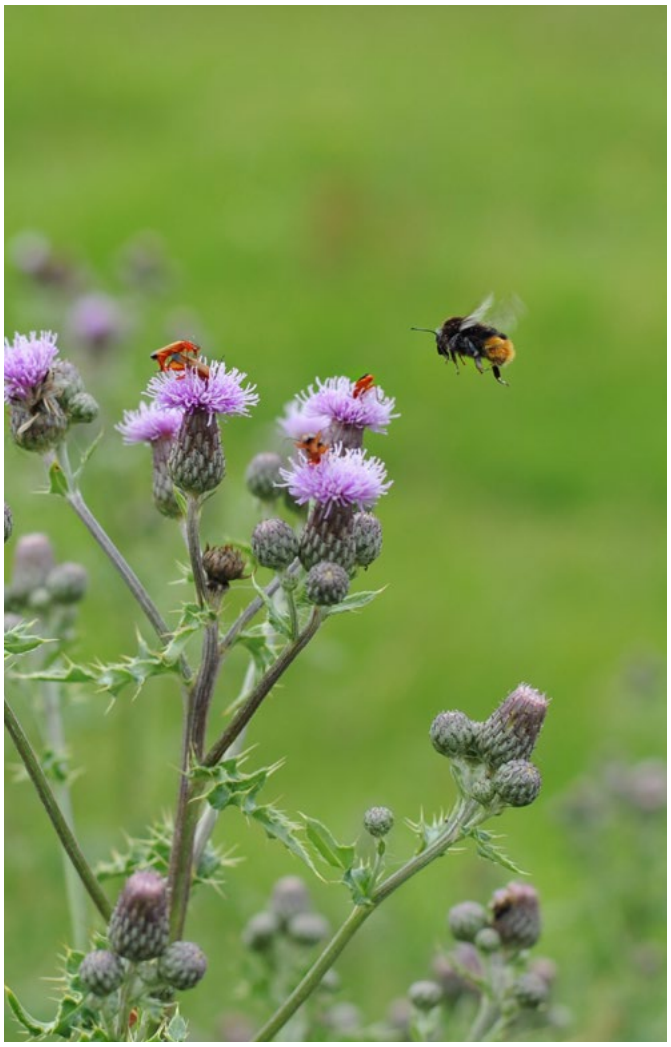
▲ Glenarm Wildlife Group, Northern Ireland

NPMS: Working in collaboration

Other biological monitoring schemes

Working in partnership goes beyond the practical, on the ground delivery, but extends behind the scenes, working with organisations and further schemes to share expertise, resources, opportunities and reflect on learnings from others in the field. This supports schemes such as the NPMS to work more efficiently, effectively and to best practice standards. As an example, the NPMS benefits from being an active member of the Terrestrial Evidence Partnership of Partnerships (TEPoP). This is a collaborative alliance, facilitated by the Joint Nature Conservation Committee (JNCC), that connects government bodies, research institutes, and environmental NGOs that monitor terrestrial biodiversity across the UK.

By sharing knowledge and opportunities across a diverse partner network, the NPMS along with other organisations and monitoring schemes, collaborate on innovative monitoring methods and tackle barriers to participation, to ultimately improve biological monitoring across taxa. All while improving data quality and usability for multiple purposes.



© Karen Fisher

Soldier beetles and bee on creeping thistle

> ***"The UK Terrestrial Evidence Partnership of Partnerships (TEPoP) was established in 2017, to bring together the organisations who work with JNCC in partnerships to lead, fund and organise citizen science-based biodiversity monitoring. Many of the challenges and opportunities relevant for engaging volunteers with monitoring one group of species are also often relevant for other taxa, and TEPoP provides a forum for us all to work on these together. TEPoP has brought together over 45 different organisations over the last 9 years through over 30 different workshops, webinars and other events, as well as supporting the development of successful joint proposals for funding. Across organisations, we have shared experiences and lessons learned from new initiatives in citizen science, as well as working together on analyses which bring together data from across the monitoring schemes, to tell us more about changes to biodiversity, and what's driving these changes. We look forward to many more years of collaboration to support terrestrial biodiversity monitoring!"***

Niki Newton, Senior Biodiversity Evidence Specialist at the Joint Nature Conservation Committee (JNCC)

NPMS: Working in collaboration

Conservation and monitoring stakeholders

Alongside other biological recording schemes, it is important that the NPMS partnership liaise and build relationships with conservation stakeholders and large-scale land managers to support monitoring and indeed embed NPMS methodology as and when appropriate. This can range from large conservation bodies and landowners to a more regional approach. Communication and cooperation are important to chart progress, in terms of survey coverage, allocation and survey data, as well as reviewing support needs. As an example, the NPMS works closely with the Nature Evidence Team within the National Trust, to offer support to volunteers and National Trust staff undertaking NPMS surveys within the National Trust estate. 107 NPMS squares overlap National Trust boundaries. In 2025 87% of squares overlapping this land were allocated to volunteers and 75% of these had data collected.

© Suzanne Farmer

"The National Trust's new strategy focusses on 1) Restoring nature, not just on National Trust land but everywhere; 2) Ending unequal access to nature, beauty and history; and 3) To inspire millions of people to care and take action for nature, beauty and history. Working with the NPMS is a brilliant way for the National Trust to support this new strategy, which puts nature front and centre of the Trust's thinking. Volunteering, citizen science and engaging people in recording schemes like NPMS will be a key way to demonstrate 'taking action' whilst also gathering valuable data on habitat quality on Trust land and contributing evidence to well-established national schemes. The National Trust is implementing a nature monitoring framework across properties and portfolios, the top tier of which is a commitment to contributing to the national monitoring squares across the National Trust estate, consisting of NPMS squares along with other national monitoring schemes such as the Breeding Bird Survey and UK Butterfly Monitoring Schemes"

Sam Munnis, Nature Evidence Ecologist, National Trust

NPMS: Working in collaboration

Experts

Coordinating and optimising the impact of such a large-scale scheme, requires the partnership to draw from the expertise of collaborators from a number of backgrounds. For example, the opportunity to work with and learn from experts in equity and accessibility supports the scheme's Diversity, Equity and Inclusion (DEI) strategy and informs best practice for opening access to citizen science and volunteering (see page 22). The partnership and scheme activities also benefit from the insights provided by social scientists and citizen science experts within the UKCEH and other TEPoP contributors.

The annual NPMS volunteer training and development programme is supported by experienced outdoor educators, ecologists and botanical experts. They impart their knowledge enthusiastically throughout the year to aid the ongoing development of participating volunteers. The verification of NPMS records, namely checking species identification, is also carried out by expert botanists usually associated with the BSBI, with good knowledge of the flora of the area, county, or region from where records originated. Across the UK, the NPMS amasses a huge quantity of species records each year, and the verification process helps ensure these records are of the highest quality possible. Comments and responses from expert verifiers can also be an excellent opportunity for volunteers to receive feedback on identification of records submitted and provide a learning opportunity for inexperienced surveyors keen to improve their identification skills.

▲ Common Milkwort

> ***"Over the past two years, NPMS partner BSBI has been working steadily to increase the number of vascular plant verifiers active on iRecord (the platform on which NPMS records are verified). When this effort began, we had around 70 verifiers supporting the NPMS. As of November 2025, we now have 150 verifier roles filled across the UK, providing coverage for 84 of the 114 UK vice-counties (the traditional units for biological records management). This growth represents a major step forward in our ability to give timely, expert feedback to recorders and to maintain the high standard of plant data that underpins the National Plant Monitoring Scheme. Verifiers play a crucial role in checking plant records submitted through the NPMS website."***

Botanical Society of Britain & Ireland

James Harding-Morris, BSBI Countries Manager

NPMS: Working in collaboration

Supporters

The NPMS is incredibly grateful for the support of landowners participating with the scheme, through providing access permissions and often liaising with survey volunteers and providing valuable site information. We also work alongside a large number of facilitators and venues for the delivery of training and events. From web developers, graphic designers, communications colleagues and indeed researchers and data users, the NPMS truly relies upon an expansive network of contributors and supporters. All of whom enable the scheme continue to go from strength to strength.

© Sarah Shuttleworth

Data and Research

NPMS data reveal stark future for Britain's native plants

Dr Rob Cooke: Report Author, UK Centre for Ecology & Hydrology

Data collected by volunteers for the National Plant Monitoring Scheme (NPMS) have played a central role in a major new study published in Nature Communications exploring the future of British biodiversity under climate and land-use change. By combining NPMS plant records with high-resolution environmental data, researchers have been able to project how plant communities across Great Britain may change over the coming decades under alternative scenarios, and to identify the scale of action needed to avoid the worst outcomes for our flora.

The research, led by the UKCEH and partners, analysed records collected since the NPMS began in 2015 for 1,002 wild plant species - around 72% of Britain's native flora. The study used standardised, plot-based NPMS surveys, which record all indicator plants present within small plots nested in 1 km squares, providing robust presence–absence data across a wide range of habitats. These volunteer collected data were essential for modelling whole plant communities, including uncommon species that are difficult to assess using other approaches.

How NPMS plant data were used

The researchers linked NPMS plant community data to information on climate, soils and topography at 1 km resolution using a modelling approach known as generalised dissimilarity modelling. Rather than focusing on individual species in isolation, this method captures changes in plant community composition - how groups of species that occur together are likely to reorganise as environmental conditions change.

Once relationships between present-day plant communities and climate were characterised, the models were projected forward under a range of future climate and land-use scenarios up to the 2070s. This allowed the team to explore:

- how different plant communities may change through time
- where existing climate–plant combinations may disappear
- where entirely new combinations may emerge
- how many plant species are likely to be pushed towards extinction at a national scale

What the study found for plants

The results show that plants are particularly sensitive to future environmental change, even more so than the birds or butterflies that were also analysed.

Even under low-emissions scenarios, the study projected substantial reorganisation of plant communities across Britain. Under a high-emissions future, 48% of native plant species in a typical local community are expected to be different by the 2070s compared with today.

© Rob Cooke

▲ Burnt Orchid (*Neotinea ustulata*)

CONTINUED ▸

© Rob Cooke

▲ Pasqueflower (*Pulsatilla vulgaris*)

One striking finding is the projected loss of current "bioclimates" (environmental conditions that support specific plant communities). Under the most severe climate scenario, 72% of Britain's land would lose its present-day plant bioclimates by the end of the century. At the same time, novel plant bioclimates, with no modern equivalent anywhere in Britain, are projected to emerge across 89% of the country, particularly in southern and eastern England.

As a result, the study projects a growing "extinction debt" for plants: species that are still present but are unlikely to survive in the long term unless conditions improve.

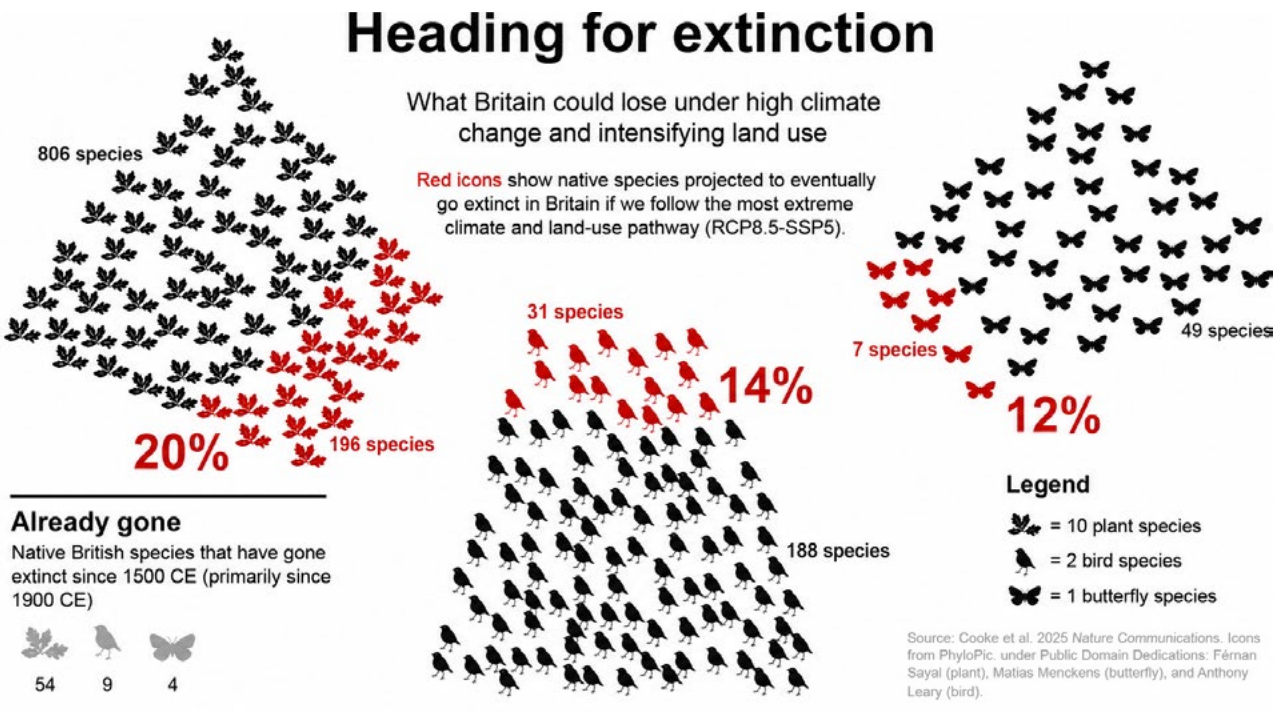
The researchers estimate that under the worst-case scenario around one in five native plant species (196 native plant species) could be heading for extinction in Great Britain. This equates to almost four times the number of historic extinctions (since 1500 CE but primarily since 1900 CE). More optimistic futures, with strong climate mitigation and more sustainable land use, could reduce plant extinctions by around a third, but would still leave many species at risk.

Why the NPMS matters

This study demonstrates the unique value of NPMS for understanding large-scale environmental change. Because NPMS plots span a wide range of climates, habitats and land uses, they already sample much of the environmental space that Britain's plants are likely to experience in the future.

Continued volunteer monitoring through the NPMS will be critical for tracking whether these projected changes become reality, identifying which habitats and plant groups are most affected, and assessing whether conservation and land-management actions are working. As the study makes clear, the next 20 years are crucial: decisions taken now will determine whether Britain's native plants face widespread loss, or whether we can still transition towards a more resilient future for our flora.

The study is freely available online (https://doi.org/10.1038/s41467-026-70064-4) and has also been reported in The Guardian.



CONTINUED ▸

Background

Rob Cooke is a Senior Ecologist at the UK Centre for Ecology & Hydrology, working at the interface of ecology, statistics, and conservation science. His research focuses on understanding how and why biodiversity is changing across spatial and temporal scales, with applications spanning plants, insects, birds and mammals. Rob applies statistical and predictive modelling to synthesise large ecological datasets and deliver policy-relevant evidence, particularly for conservation decision-making, extinction risk, and biodiversity indicators. He previously worked as a postdoctoral researcher at the University of Gothenburg in Sweden and has experience in conservation through his work as a Trustee of Withymead Nature Reserve and with the IUCN Antelope Specialist Group. He obtained his PhD from the University of Southampton.

> ***"Some species that have been part of our landscapes for centuries are now at risk of being lost, possible examples include Burnt Orchid, Grass-of-Parnassus, Pasqueflower, and Alpine Gentian."***

Dr Rob Cooke

Studies using NPMS data in 2025

From climate exposure analyses and modelling techniques to the national vegetation plot database for Great Britain, NPMS data have been used in over 650 studies to date. Below is a list of the studies and reports using or referencing NPMS data throughout 2025.

Barnes, Ailidh E., Michael JO Pocock, Maddie M. Harris, Niki Newton, and Robert A. Robinson. "Not just species recording: the potential of citizen science for habitat monitoring." *Landscape Ecology* 40, no. 9 (2025): 181.	https://doi.org/10.1007/s10980-025-02155-4
Pescott, Oliver L., and Robin J. Boyd. "Stabilising sparse-data trends in the National Plant Monitoring Scheme: a scalable Bayesian model for plant abundance." (2025).	http://dx.doi.org/10.13140/RG.2.2.36345.38248
Pescott, Oliver L., Gary D. Powney, and Rob J. Boyd. "Adaptive sampling for ecological monitoring using biased data: a stratum-based approach." *Oikos* 2025, no. 10 (2025): e11115.	https://doi.org/10.1002/oik.11115
Wood, Claire M., Marc J. Metzger, and Robert GH Bunce. "Protecting the Bunce legacy: Lessons learned from safeguarding long-term ecological survey datasets in Great Britain." *Environmental Management* 75, no. 7 (2025): 1872-1885.	https://doi.org/10.1007/s00267-025-02175-5
Marshall, Z., Wood, C., Mountford, E., Rodwell, J., Strachan, I., Pescott, O., Tatarenko, I., Hodgson, J., Walker, K., Latham, J. and Maskell, L., 2025. "A national vegetation plot database for Great Britain". *Vegetation Classification and Survey*, *6*, pp.181-190.	https://doi.org/10.3897/VCS.160378
Mascia, Raphaella. "A mixed methods approach to evaluate community (citizen) science as a tool to support nature's benefits assessments in the UK: a systematic review and survey of community scientists." (2025).	DOI:10.32942/X2RP8C
Holman, I., L. Jones, Z. Marshall, R. Matthews, D. Sandars, K. Sawicka, G. Siriwardena et al. "Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP)." (2025).	https://www.ceh.ac.uk/our-science/projects/erammp

Data and Research

NPMS Species Indicator Trends

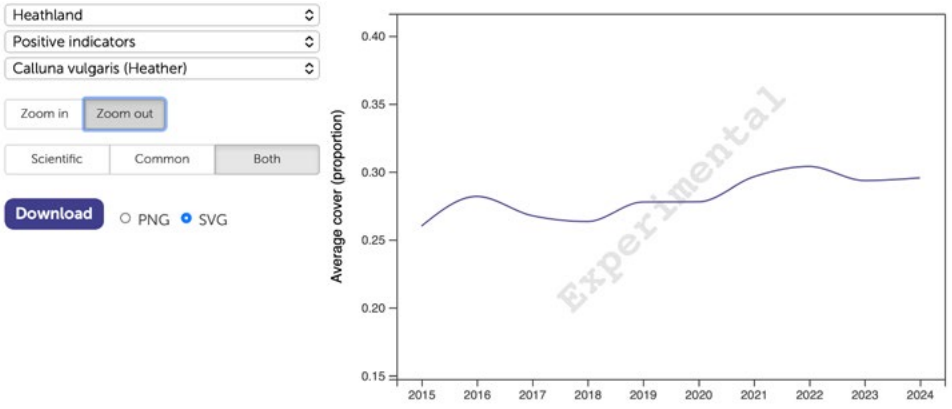
Kevin Walker – Head of Science, BSBI

Although NPMS was designed to help us track trends in changes in the status in habitats at the national scale, it also provides trends for the indicators that form the basis of the scheme. Work at UKCEH to develop these trends in recent years and to visualise them now means that anyone can view them on the website. The plots below illustrate how the average percentage cover of a species across all plots within an NPMS fine-scale habitat has changed by year. These models follow the approach used to create the C7 "Plants of the Wider Countryside" indicator within the Defra/JNCC UK Biodiversity Indicators (https://jncc.gov.uk/our-work/ukbi-plants-of-the-wider-countryside/). The technical background to this model has been published in two reports (Pescott et al., 2019; Pescott & Boyd, 2025). These statistics are currently classed as "experimental", reflecting that the broad-habitat level indicators based on them are not currently accepted as "Official Statistics" within the UK Biodiversity Indicator set. Work is ongoing to adjust these measures for inter-annual variability in geographic sampling biases.

To find them click on <Resources> on the NPMS website and then <Indicator species trends>. To display a species plot, first select the habitat from the dropdown, then whether you wish to view positive or negative indicator species. Having made this selection a list of taxa will appear. As an example let's take Heather (*Calluna vulgaris*). This is selected by clicking <Heathland> and <Positive indicators>. It then appears as the third option down on <Select indicator taxon>.

By selecting this we generate the plot below alongside a photo of the species taken from the Plant Atlas 2020 website (https://plantatlas2020.org/)

The buttons on the left of the plot allow you to switch between scientific, common names, or both, and to zoom in or out on a trend by changing the range of the y-axis. You can also download the graphic in either .png or .svg formats.



Pictured: *Calluna vulgaris* (L.) Hull (credit: Rob Still / Chris Gibson)

CONTINUED ▸

© Kevin Walker

▲ A moorland in Upper Nidderdale that is managed for Red Grouse but where both levels of grazing and burning are being reduced to improve the condition of wet heath and blanket bog. Note that this photo includes 2 NPMS habitats

As can be seen from the plot for *Calluna vulgaris*, the plots provide an indication of the overall change in abundance of Heather across the entire NPMS sampling network from year to year. Whilst we would not expect to see dramatic inter-annual changes from long-lived species such as Heather, we may be able to pick out specific events in which are likely to have affected the species in a year, such as droughts, wildfires or outbreaks of Heather Beetle (*Lochmaea suturalis*). Over longer timescales trends might emerge. In the case of Heather there does seem to be a gradual increase in abundance in NPMS plots since the scheme started in 2015. The reasons underlying this trend have not been researched in detail but hypotheses might include the improvements in the condition of heather moorland due to habitat restoration that aims to reduce burning and grazing, both critical factors that have reduced the cover of Heather over the last century. There is a very lively ongoing debate about the pros and cons of burning of heather moorland and this came to the fore again in recent weeks due to the publication of a new paper (Whitehead et al., 2026). The government now seems to be indicating that they will increase regulation on grouse moor management which will ultimately reduce levels of burning with likely consequences for species monitored by the NPMS.

This illustrates the value of NPMS data and how it can start to help us understand how our environment is changing, not only in broad terms as assemblages (habitats) but also at the fine-grained species-level. We have just picked one, albeit an important example, but there are likely to be many others that illustrate broad trends in other habitats. We look forward to reporting on more of these in the future.

References

Pescott, O.L., Powney, G.D. & Walker, K.J. 2019. Developing a Bayesian species occupancy/abundance indicator for the UK National Plant Monitoring Scheme. UKCEH Technical Report to JNCC.

Pescott, O.L. & Boyd, R.J. 2025. Stabilising sparse-data trends in the National Plant Monitoring Scheme: a scalable Bayesian model for plant abundance. UKCEH Technical Report to JNCC.

Whitehead, S.C., Aebischer, N.J. & Baines, D. 2026. Vegetation responses to experimental prescribed burning and cutting of Heather on blanket peat sites managed as grouse moors in northern England. Applied Vegetation Science 2026: 29:e70066.

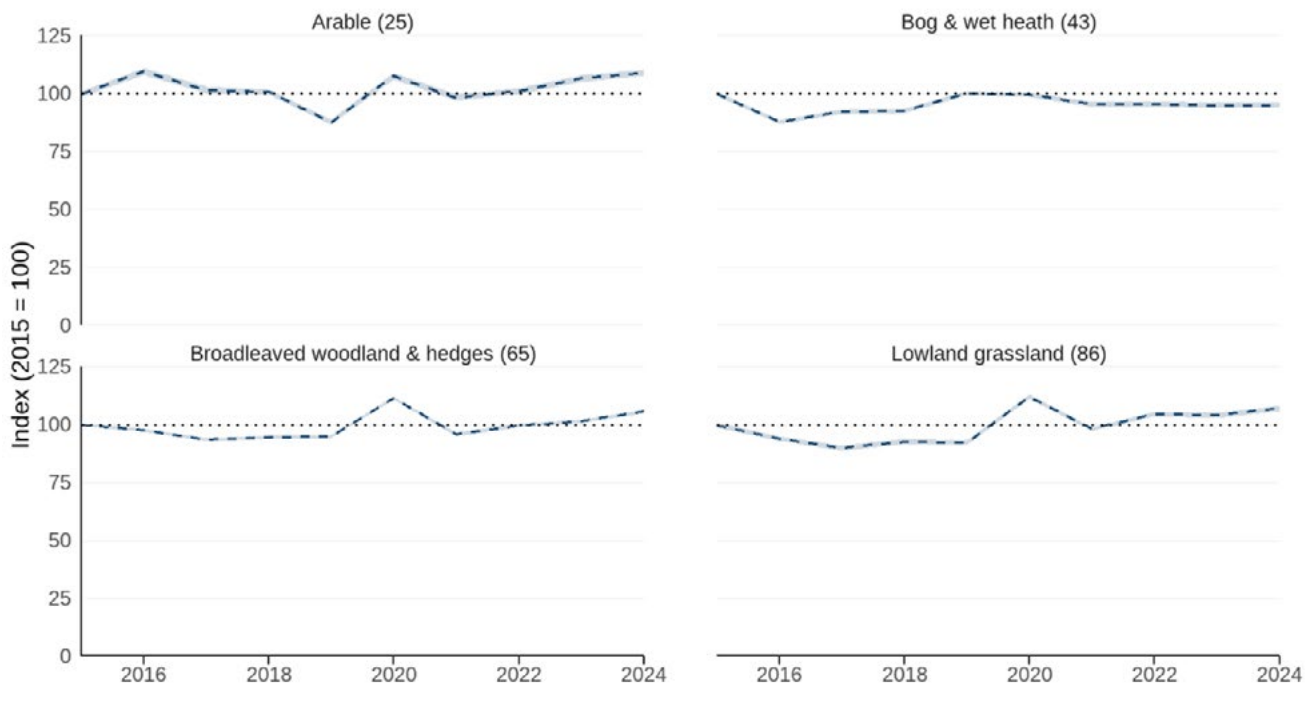
Data and Research

Three government biodiversity indicators based on NPMS data

Since 2020, volunteer-collected, NPMS data feed into the headline UK Biodiversity Indicator "Plants of the Wider Countryside". The latest update was released here at the end of 2025, incorporating NPMS data up to 2024. Whilst this is still an "official statistic in development", the statistics for positive indicators in the Arable, Bog & wet heath, Broadleaved woodland & hedges and Lowland grassland NPMS broad habitats are close to their long-term averages, with the largest increases seen in Arable (index 109% of 2015 baseline) and Lowland grasslands (107% of baseline). Bog and wet heath has seen a slight decrease (a 5 percentage point drop in the average abundance of the positive indicator species being monitored).

2025 also saw the development of a comparable indicator for England alone. This has been published here and shows similar average trends to the UK statistics. The National Plant Monitoring Scheme also continues to feed information on species' abundances across all monitored habitats in England to the headline "Indicators of species abundance in England" statistic. This measure attempts to combine information across all taxa for which abundance data are available, showing "deterioration" from 1970 to 2023, but little or no change in the medium- (from 2013) and short- (from 2018) terms. This is also an "official statistic in development" and is intended to track the government's progress towards meeting the statutory target (Environment Act 2021) of halting the decline in species abundances by 2030.

Abundance of plant species in four UK broad habitat types, 2015 to 2024



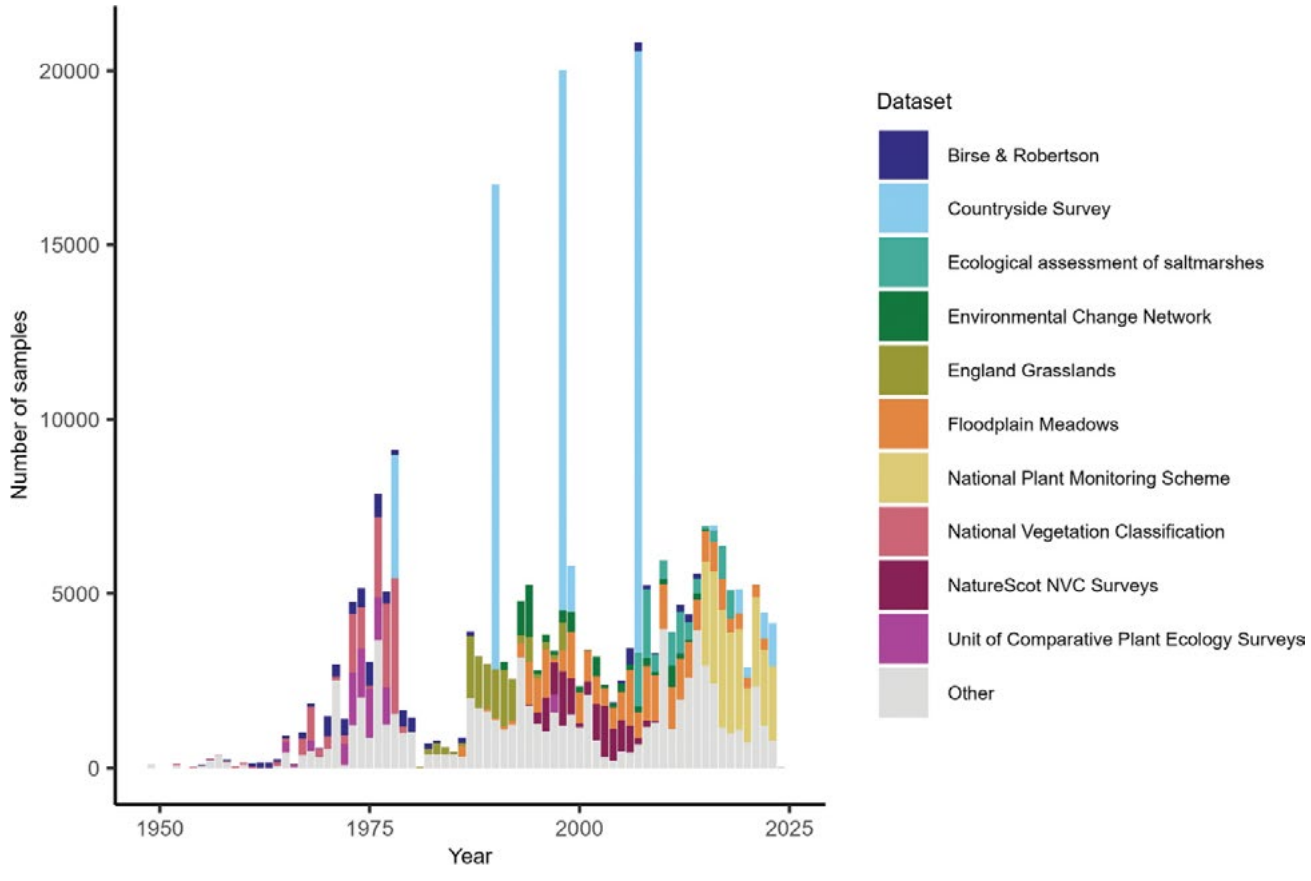
Data and Research

NPMS Data included in National Vegetation Plot Database

National Plant Monitoring Scheme data have been included in the National Vegetation Plot Database for Great Britain (GBNVPD), launch in 2025. This newly created database acts as the centralised repository for vegetation plot data from Great Britain, the Isle of Man and the Channel Islands. As of May 2025, the GBNVPD contains 277,070 samples from 200,733 plots (208,399 plots when including all nested areal scales), from 63 constituent datasets, surveyed between 1949 and 2024. The NPMS currently contributes 23,742 samples covering 4,931 plot locations (data up to 2023). The NPMS is also the largest annual contributor of samples to the GBNVPD since 2015.

The GBNVPD is intended to become the central store for British quadrat data, and will likely go on to underpin many exciting analyses and provide numerous insights into our changing environment. The open access paper can be found at https://doi.org/10.3897/VCS.160378

The number of vegetation plots recorded by year for the top ten largest and all other datasets. NPMS data are shown in beige.



Volunteer engagement and training

NPMS support and guidance videos 2025

NPMS videos shared in 2025: **12**

Total NPMS training videos available to view publicly: **72**

Video views 2025: **11,275**

Total views 2015-2025: **61,812**

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

Most popular training 2025

Classes for Grasses 2 - The usual suspects

NPMS Training 2025

2025 training and engagement events:

17 in-field training events

10 online workshops and webinars

Total: 27

> ***"I was surprised by the amount I didn't know and in a well-presented workshop, how much it was possible to learn and retain."***

2025 training and engagement session attendance

350 Participants

> ***"Very uplifting and restorative."***

A new "NPMS10 Celebration" section of the NPMS Resources web page has been created to provide ideas and resources for activities and local engagement, to help celebrate the efforts of NPMS volunteers and the incredible value of the data they collect.

▲ The bi-annual NPMS volunteer newsletter also continues to prove regular guidance, tips and news features, alongside volunteer experiences.

NPMS News features

Anniversary celebrations

The last 10 years have seen the National Plant Monitoring Scheme go from strength to strength, and plant monitoring become more cemented as a key piece of national biodiversity monitoring work. Throughout 2025, the NPMS celebrated its 10-year anniversary – enjoying online and in-field events, and hearing from both volunteers and stakeholders.

It was a real tribute to the success of the scheme thus far, the building of this valuable long-term dataset, and the tremendous dedication and effort of the NPMS volunteers, without whom the last 10 years would simply not have been possible.

Thank you to all those that joined us and contributed!

© Kim Lake

▲ NPMS10 celebration and workshop, Co. Armagh

© Rachel Murphy

▲ Sand dune species training, Bridgend

These events celebrated the joy of monitoring the UK's amazing plant life and the fantastic contribution from volunteers, collaborators, landowners and others. You can watch our short celebration videos and all the presentation recordings from the autumn online event, on the NPMS Support YouTube Channel.

▲ NPMS Volunteer voices video

◀ Celebrating the 10 year anniversary of the National Plant Monitoring Scheme and scheme milestones

Find out more about all aspects of the scheme and NPMS data. From insights gained from NPMS records and to how NPMS supports local nature monitoring and strategies, to volunteer roles and experiences.

Watch the NPMS videos on YouTube here

NPMS News features

BSBI Northern Ireland Botanical Skills and Evidence Project: NPMS Update

The BSBI Botanical Skills and Evidence Project continues to support the National Plant Monitoring Scheme (NPMS) in Northern Ireland by focusing on volunteer development and practical barriers to recording.

Growing our Community

It's been a fantastic year for getting people outdoors. In 2025, we hosted 11 training sessions for 79 participants, while our outreach work reached another 20 nature enthusiasts. 19 new squares were allocated to volunteers following these activities!

Our sessions focused on the essentials - building the confidence to identify plants and the tech-savvy to submit data. We've also deepened our links with organisations like the Belfast Hills Partnership, Glenarm Wildlife Group, the National Trust, and the RSPB Youth Network, helping them make NPMS surveying a natural part of their local projects.

Glenarm Wildlife Group, Co. Antrim (NI)

Checking species IDs in Lough Neagh, Co. Armagh (NI)

Cheers to 10 Years!

The 10th anniversary of the NPMS gave us the perfect excuse to bring everyone together. We hosted two big regional celebrations at the Lough Neagh Discovery Centre and in Glenarm.

These events were all about sharing skills — from botanical photography to tricky ID tips — and showing our volunteers the "big picture." We also practiced our survey skills in between rain showers. Between our local meetups and a UK-wide online party, it was inspiring to see how a decade of hard work is now being used to make real-world decisions about conservation and land use in Northern Ireland.

NIEA Northern Ireland Environment Agency
www.daera-ni.gov.uk

NPMS News features

© Sarah Williams/Plantlife

New Land Access Support

Following feedback from volunteers, both existing and potential, the NPMS Support team have developed a new Access Permissions Support Toolkit, now available on the Resources page of the NPMS website.

Navigating and orienting around a previously unknown 1km square can be a daunting first task for volunteers newly allocated to a survey square. But this can also be an exciting time, discovering new areas and identifying different habitats. As such, materials have been reviewed and the new toolkit developed to support volunteers in exploring and getting to know their site, while also providing top tips and tool recommendations for requesting land access permissions.

The New toolkit contains:

- Access Permissions letter templates (English only, Bilingual Welsh/English and for volunteers in Northern Ireland).
- NPMS leaflet for landowners
- Access and navigation: Mapping Tools and links
- Access Permissions FAQs
- Landowner FAQs
- Template landowner thankyou letter

NPMS News features

Citizen science for Advancing Racial Equity in Environmental Research Super-consortium

The environmental workforce lacks ethnic diversity at every level. The NPMS has been involved in CAREERS, a research and engagement project focused on making environmental research and careers more inclusive, working alongside the YCEDE- a Yorkshire Consortium for Equity in Doctoral Education and UKTePoP partners. UKTePoP - A partnership of UK organisations using citizen science to monitor our environment with a joint commitment to diversity, equity and inclusion.

In 2025 the CAREERS consortium received an initial 9-month funding from the Natural Environment Research Council (NERC) to scope and pilot approaches to inspire and enable people of colour to be part of the future talent pipeline. This pilot phase explored some of the barriers and enablers to accessing environmental research, education and citizen science for people from diverse ethnic communities, through practical action. This included running a successful National Plant Monitoring Scheme (NPMS) and botanical monitoring day for students at Plantlife's Three Hagges Woodmeadow Reserve in the autumn, alongside other project field days, focus panels and feedback activities. Staff from participating organisations and monitoring scheme coordinators also partook in racial literacy training and interactive workshops to help review and improve the accessibility of their programmes.

> ***"I feel included and supported, welcomed and important; which let me feel free to learn engage and develop my skills"***
>
> **Participating student**

The outcomes of this first phase are helping to inform best practice for opening access to education, volunteering and careers. The programme proved to be greatly beneficial to the NPMS, providing insight and informing actions, as part of the scheme's Diversity, Equity and Inclusion (DEI) strategy, to review and improve scheme accessibility.

> ***"Very thought provoking and energising. Great mix of provocative, big picture thinking and practical tangible actions to take."***
>
> **Staff reflection**

CAREERS student engagement day at Plantlife's Three Hagges Woodmeadow Reserve

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, 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 Landscape Partnership, Yorkshire Dales National Park, South West Scotland Environment Information Centre, Cornwall Wildlife Trust, Cairngorms National Park and the National Trust. Also, all the AONBs, National Parks, Record Centres and other organisations and individuals who have promoted and supported the scheme. Thanks to Andrew van Breda, Biren Rathod and Karolis Kazlauskis for Website and App support.

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 / 07399 299770

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

Instagram: @the_npms

Bluesky: @npms.bsky.social

X: @theNPMS

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

Front cover image credit: Survey volunteer Chris Millett © Rachel Murphy
Back page image credit: © Ava Marley
Design: evansgraphic.co.uk
National Plant Monitoring Scheme (2026) NPMS Annual Report 2025. Unpublished report, Salisbury.

The National Plant Monitoring Scheme (NPMS) is organized and funded by the UK Centre for Ecology and Hydrology, Botanical Society of Britain and Ireland, Plantlife and the Joint Nature Conservation Committee. The NPMS is indebted to all volunteers who contribute data to the scheme.

Botanical Society of Britain & Ireland

JNCC

Plantlife

UKCEH