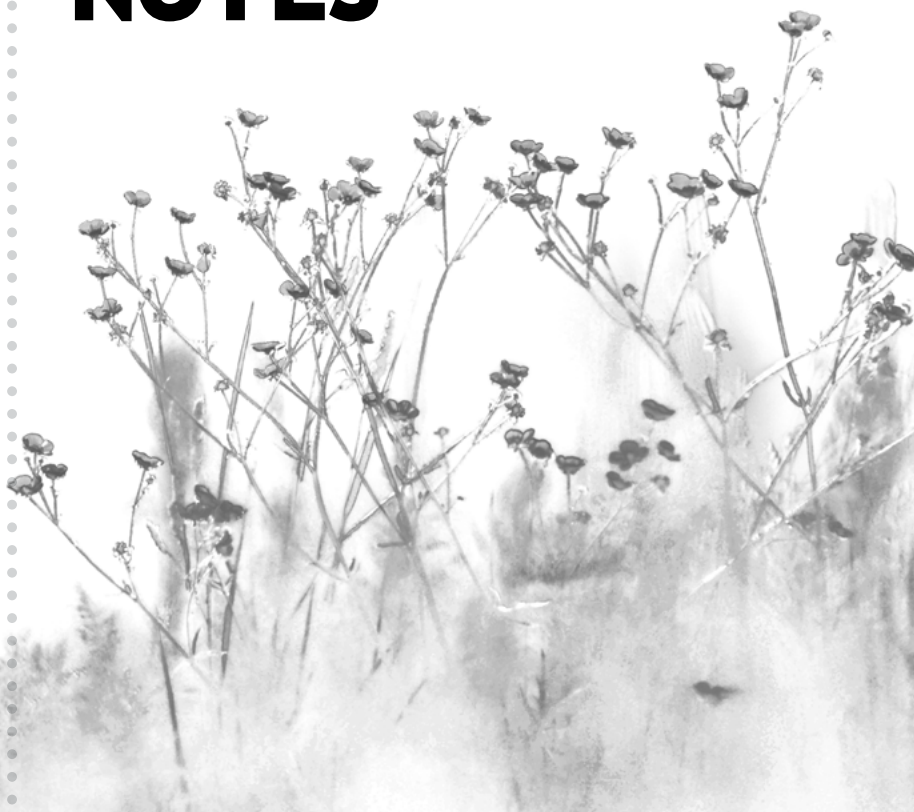




# National Plant Monitoring Scheme + **SUPPLEMENTARY SURVEY GUIDANCE NOTES**



## Support and advice

This supplementary guide has been produced for NPMS+. Please use this in conjunction with the National Plant Monitoring Scheme Survey Guidance Notes.

NPMS+ uses National Plant Monitoring Scheme methodology at a local level. If you need any advice or support about the surveys for NPMS+ then please contact your organizational representative.

Online training for the National Plant Monitoring Scheme is available by visiting [www.npms.org.uk](http://www.npms.org.uk)

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



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NPMS+

# **SUPPLEMENTARY SURVEY GUIDANCE NOTES**

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## Background information

The National Plant Monitoring Scheme was launched in 2015. The national scheme is an on-going survey that focuses on plant recording in specific habitats (NPMS habitats) and provides statistically robust data on plants and their habitats nationally. The scheme is run by a partnership of the Botanical Society of Britain and Ireland (BSBI), Centre for Ecology and Hydrology (UKCEH), Joint Nature Conservation Committee (JNCC), Plantlife, and the Department of Agriculture, Environment and Rural Affairs Northern Ireland (DAERA), and employs a volunteer-driven, citizen-science approach to data collection and surveying. The NPMS requires that surveyors register with NPMS, before being allocated a kilometre square in which to carry out the survey.

NPMS+ has been developed as a separate scheme which follows the NPMS methodology but can be used at a local level by an individual or organisation. This broadens the capacity and accessibility of the survey, while contributing to an archive of reliable, comparable data. The survey focuses on plant recording in specific habitats (expanded to include additional NPMS+ habitats as well as the core NPMS ones) and provides data that will enable the organisation to:

- **Learn more about where wild plants are growing and how their populations are changing over time**
- **Measure and monitor the condition of habitats**
- **Use plants as ‘indicators’ to inform and guide management practice**

## 1.1

### What is different from the National Plant Monitoring Scheme?

- The location of the 1km survey square can be designated by the organisation, rather than being assigned to them in a semi-random way.
- The minimum number of survey plots within that 1km survey square will be determined by the organisation
- Surveys can be carried out in both NPMS and NPMS+ habitats (see NPMS Survey Guidance Notes for previously determined NPMS habitat descriptions, see Appendix 1 below for new habitat additions included in NPMS+)
- The number of square plots to linear plots will be advised by your organisation. The recommended minimum for NPMS is 3 square and 2 linear plots.
- If your organisation wants to monitor additional species that are not listed under the NPMS or the NPMS+ species indicator lists, then this is possible using the Plant Portal (<https://plantportal.ceh.ac.uk/>). Additional identification support will need to be provided for your surveyors if the species do not occur in the NPMS ID guide or NPMS+ ID guide.

## What do I have to do?

### 1 Survey plots for indicator species, or the entire species suite, depending on the level at which you're participating

- ✓ The number of plots per 1km survey square to be surveyed will depend on what is specified by your organisation.
- ✓ Most plots will be either 5x5m, or 10x10m for woodland plots. Most linear plots will be 1x25m in size.
- ✓ Individual plots should always be located in a single habitat, rather than spanning multiple habitat types.

### 2 Enter findings online

Please enter your data via the Plant Portal at <https://plantportal.ceh.ac.uk/>

This provides the most efficient way of ensuring that your findings contribute to annual reporting on the state of habitats as well as building up a picture of how the habitats are changing over time. If you cannot enter your data online then please contact your organisational representative for more information.

## 1.3

### Additional requirements from your organisation

#### Additional species

It might be that your organisation has additional monitoring requirements that result in additional species of focus. Your organisation will provide you with details of these additional species and can be entered on the Plant Portal.

## 1.4

### Selecting plots - Either:

- 1** Your organisation has provided you with plots and their locations. These have been entered on the Plant Portal. You then need to locate these plots in the 'Squares List' under 'My Projects' using the grid reference and description given.
- 2** Your organisation has provided you with plot location suggestions. These plots will need to be located in the field and either confirmed as a suitable location or amended as necessary. You will then need to create the plots on the Plant Portal by navigating from 'My Projects' → 'Squares List' → locating the correct 1km<sup>2</sup> survey square → 'Add/Edit Plots' → 'Add Plot' and then inputting the spatial reference of the centre of the plot as the final grid reference.
- 2** Your organisation has provided you with a grid that can be used with your 1km<sup>2</sup> survey square to select plots based on a randomised method (see 2.2 of the NPMS guidance notes booklet).

## Appendix 1:

# Habitat types

There are 28 fine NPMS habitats which can be combined into 11 broad NPMS categories. NPMS+ has one additional broad habitat category and one additional fine habitat category. See page 2 of the NPMS Survey Guidance Notes for information on how to categorise broad and fine habitats.

### 1. *NPMS+ Additional Broad Habitat Category - Brownfield* comprising: Brownfield

Brownfield is any piece of land which has been altered by human activity, not including farmland, commercial forestry or parkland. These can include former industrial estates, quarries, spoil heaps, disused railway lines, landfill sites and disused airfields. Brownfield sites can vary in wildlife value dependent on levels of human activity and inactivity over time, soil nutrients and introduced substrates (chalk, sandy dredgings, industrial materials). Variation across the site in topography, soil type, water levels and pH can all increase the diversity of microhabitats within the site and therefore the species diversity. Species composition as a result can vary widely but generally includes early successional communities. Brownfield sites can also consist of stress-tolerant species, annuals, mosses/liverworts, lichens, ruderals, heathland, open grassland, flower-rich grassland and aquatic or marginal species. There can be unvegetated bare substrate that may be compacted or loose material/scree, and pools or damp habitats. The plant communities can lack a clear dominant species and generally consist of a mixture of low-growing plants. Some brownfield sites may include areas where tall herb species can dominate, such as willowherbs, Bramble or Himalayan Balsam.

Not all brownfield sites will have a mosaic of habitats, particularly where hardstanding areas dominate. If there has been limited disturbance or similar levels of disturbance across a whole site, there might not be much variability in vegetation. Therefore, instead of a mosaic of habitats, the whole site can be dominated by species-poor grassland, scrub or even woodland. Those sites which have developed into all scrub or woodland should then be considered under another NPMS category or not recorded in this scheme.





Brownfield with seasonal pools, tall ruderals, sparsely vegetated gravels, reedbed and topographic variation. Location: Slagheaps in Scunthorpe.



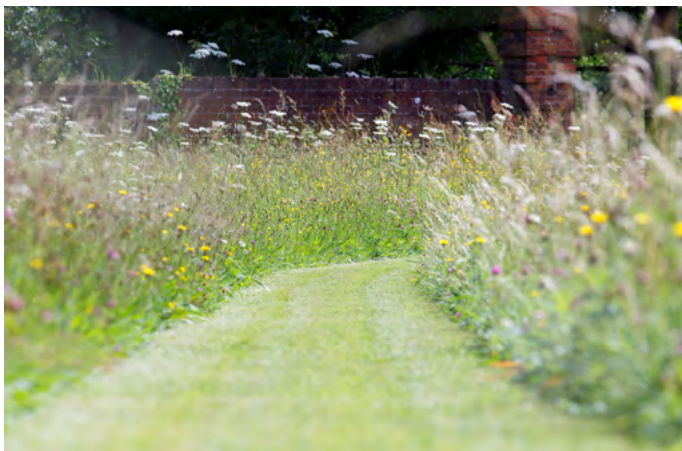
Brownfield with areas of secondary woodland, hardstanding with short pioneer species. Location: Coventry, West Midlands.

2. *NPMS Existing Broad Habitat Category - Lowland grassland* comprising: Dry acid grassland, Dry calcareous grassland, Neutral damp grassland, Neutral pastures and meadows, and **Amenity grassland** (see below for Amenity grassland, and the National Plant Monitoring Scheme Survey Guidance Notes for the remaining Lowland grassland fine habitat descriptions).

**NPMS+ Additional Fine Habitat Category - Lowland grassland:**

**Amenity grassland** is generally classified by the way it is used and managed rather than by the species assemblages that are present. It normally comprises intensively managed and regularly mown grasslands including lawns, playing fields, golf courses and parks. The grass sward may be a mix of low or closely mown areas with other areas left longer, potentially for wildlife benefit. Where the sward is mown regularly, species that are present are often low-growing and flower periodically between cuts including Daisy, Dandelion, Ribwort Plantain, Selfheal, speedwells, Common Mouse-ear and clovers.

The species composition will depend on whether the site has been seeded or re-seeded or is remnant historic grassland. If the amenity grassland has a sward rich in herbs, it may be more like that of one of the other Lowland grassland fine habitats. In these cases consult with your organisational representative for guidance on which habitat to record in.



Amenity grassland can include areas of long and short turf.



Amenity grassland often includes areas used for high traffic such as playing fields or play parks.



The NPMS+ project is funded by the Joint Nature Conservation Committee (JNCC) and supported by the National Plant Monitoring Scheme partnership.



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

Cover photograph: ©Andrew Evans

Design: [evansgraphic.co.uk](http://evansgraphic.co.uk)

