

Arable Plant Inventory Instructions

The Arable Plant Inventory Survey is designed to gather a large volume of information in a standardised manner. It is a complete survey of all plants found in an arable field, generally at a presence/absence level. The Inventory Survey is being used as part of the Colour in the Margins project, but may also be used elsewhere to survey arable land where permission has been granted. Please feel free to use this method if you are outside of the project focus areas, but you will need to make sure that you have the landowners' permission to survey their land. The landowner contact details will be supplied if you are volunteering for the Colour in the Margins project so that you can organise a convenient survey time.

What you will need to complete an Inventory Survey?

- Your survey pack, including a map of the fields to be surveyed (if you are in one of the Colour in the Margins target areas this will be supplied) and survey recording forms or download the spreadsheet onto a mobile phone or pad if you wish to fill it in digitally.
- Plant identification sheets and/or wildflower key
- An OS map of the area and / or a GPS
- Pens / pencils (unless recording digitally)
- Hand lens
- Camera

When to do an Inventory Survey?

Each field only needs to be surveyed once each year unless you would like to make more than one visit. Sometimes, plants will germinate late in the season, particularly if there is a dry spring which will delay seed development. Surveys should be carried out from late May / early June, but will need to be completed prior to the crop being harvested which can be as early as the end of July.

How to carry out the survey

1. **Contact the farmer to organise a survey date that is convenient for both of you.** Surveying the edges of arable fields can take a long time, so you may need more visits if there are a large number of fields, or you are only able to survey during the late afternoon and evening. Remember to ask the farmer whether they'd like to meet you before the survey and location of the farmhouse or where to meet at the farm.
2. **Start the survey.** Meet with the farmer if this is what you have agreed beforehand, and then go to the fields that are identified for survey (for Colour in the Margins, refer to the map provided).
3. **Survey each field separately.** Each field needs to be surveyed separately so that the diversity of the flora can be identified. Fields, even neighbouring fields, can differ hugely in the species of the plants present. This depends on the crop, which may be in rotation around the farm such as a cereal one year followed by rape or field beans, etc.

4. Fill in some basic information about the farm and field on the recording form:

- Under Site Name put in the name of the farm or holding
- In Row 1 from Column E onwards, enter the name or number of the field. This should correspond with the information on the map that has been provided to you and is a way of noting individual fields that you have surveyed.
- In Row 2 from Column E onwards, enter the farm name. Some farms are split with separate names, and these can be used here if they differ from the Site Name. If the same Site Name applies for the whole farm enter the Site Name for each field surveyed.
- In Row 3 from Column E onwards enter in the surveyors name.
- In Row 4 from Column E onwards enter in the date in the format DD/MM/YYYY. If you surveyed over a range of dates within a single year, use the most appropriate date rather than enter a range. Use different columns for different years entering all the information again.
- In Row 5 from Column E, enter in the crop, for example spring barley, winter wheat or field beans.
- In Row 6 from Column E, enter a grid reference for the centre of the field (see the last page of this form about how to take a grid reference).

If you have split the field into sections that are under different management regimes, such as conservation headlands, bird plots or cultivated margin, and cropped, then please use the central field grid reference for the area and put each different management regime into separate columns. Then you're ready to start recording.

5. **Walk the field boundary of each field recording the plants that are present.** The majority of arable plants grow within the outer 6 m margin of the field where less herbicide and fertiliser is applied. In order to prevent significant disturbance to the crop, access to the crop should be limited to the outer margins. If access needs to be made to the central part of the crop, such as to reach a bird plot, tramlines should be used. Put a 'p' (for present) into the cell corresponding with the field that you are in.

If you find a rare plant, one that is Vulnerable, Endangered or Critically Endangered, take a grid reference or range of grid references and either estimate or count the population if it is small. This information can be entered into the spreadsheet cell for the field against the name of the plant.

6. **Mark on your map the location of any particular plants that you have found** that you feel are of interest, such as those that are particularly rare or areas with a greater number of species. This can be on the OS map provided in the survey pack (if the survey has been allocated as part of Colour in the Margins) or on a separate map or draw a sketch map if you wish to provide further detail. You can also add any other relevant information by annotating your map
7. **Fill in any uncompleted information** once back home and return the form to the Colour in the Margins Officer to feedback the information to the landowner.