

IAPA Survey Instructions

The Important Arable Plant Area (IAPA) Survey is designed to gather a large volume of information in a standardised manner. It is a survey for rare and threatened arable plants and is usually undertaken at a presence/absence level. The IAPA 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 IAPA 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 IAPA 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. For this reason, we recommend early liaison with the landowner so that an appropriate survey date can be organised.

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. Even neighboring fields can differ hugely in the diversity of the plants present. Past and current management can affect plant diversity and community composition

greatly. Fill in one recording form per field and provide an eight-figure grid reference for the center of each field being surveyed. This can be done by referring to an OS map, using an app or a GPS (see information in the last section about how to take a grid reference).

4. Identify the soil type(s) present.

- Sandy soil is coarse and falls apart when rolled together. Tends to be freely draining.
- Clayey soil has very fine particles that form a ball when rolled together. Tends to be slowly permeable.
- Chalky soils are derived from chalk (with flints) or thin limestone soils.
- You may also find the soilscales website useful and is worth referring to prior to the survey date: landis.org.uk/soilscales/

5. Walk the field boundary of each field. 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 tramlines should be used.

6. Complete the Site Information and Soil and Management information boxes (on the first page of the recording form). Update the form to indicate the soil type(s) at the site. Where possible include information about land management. Although it is not expected that land management information is sought by the volunteer it might be that relevant details are gathered through general conversation with the farmer or through observation.

7. Record presence / absence of each IAPA species. Accessible parts of the field should be walked, focusing on field margins and field corners. The presence/abundance for each indicator species should be recorded at a field level. If you record abundance, use the DAFOR scale:

Dominant	80-100%
Abundant	60-79%
Frequent	40-59%
Occasional	20-39%
Rare	1-19%

8. 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
If you think that a particular plant has been sown as part of a seed mixture, make a note of this in the comments box. Cornflower, corn marigold, corn chamomile (Austrian chamomile) and corncockle are often used in 'cornfield flower' mixtures.

9. Fill in any uncompleted information once back home and return the form to the Colour in the Margins Project Officer to feedback the information to the landowner.