National Education Nature Park

The Grassland Plant Survey - Expanded

Dive deeper into grassland habitats on your site by taking part in the Grassland Plant Survey. The survey has been adapted for learners of different ages from the National Plant Monitoring Scheme.

There isn't any need for prior experience in plant identification. The resources accompanying the survey will help learners identify different plants and carry out the survey.

Teaching time

30-40 minutes

Learning outcomes

- to identify different grassland plants
- to record and interpret data about grassy areas in their setting
- to understand their role and contribution of their data as part of the National Education Nature Park

Step by step

1. Decide where on your site you want to do the survey. If your site has already been mapped, use the habitat map to help choose your location. The **planning and preparing your nature surveys page** can give you ideas for what to investigate with your survey.

2. Use the PowerPoint to introduce the survey to your group and distribute the relevant materials for doing it directly online or starting offline.

3. Divide your class into groups (three works well) and head outside and place 50cm x 50cm quadrats in the chosen grassland habitat.

4. Check your learners have entered the right date, time and location for the survey.

5. If you have access to mobile devices, encourage your learners to take a photo of their quadrat from above and from the side as asked for in the survey form.

Green Skills

Suitable for

Key Stage 4
Key Stage 5

Location

Outdoors

Season

Spring
Summer
Autum
Winter

What you'll need

If doing digitally:

- a patch of grass on your site
- 50cm x 50cm quadrats (home-made or shop bought) or 55-60cm hoops
- mobile devices to access the survey

If doing on paper:

- a patch of grass on your site
- 50cm x 50cm quadrats (home-made or shop bought) or 55-60cm hoops
- printed survey form
- clipboard and pencils
- camera to take photos of your quadrat (if possible)

If you are wanting to upload your results your site needs a site boundary.

Key vocabulary

Grassland
Quadrat
Habitat
Indicator plants
Rosette

Support and extension opportunities

- Survey intro PowerPoint – this introduces the survey and should set up learners for the activity.
- The leaves that are collected by learners could be used for a range of things such as art or studying leaf features back in the classroom.
- Learners can look at the data they have collected and do statistics on it as a group.

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Step by step (continued)

6. In Part 1 learners will be asked to complete three activities;
   a. Measure the tallest plant in their quadrat and measure it from where it grows in the soil – ensure the bottom of the ruler is on the soil
   b. Pick one leaf from each plant growing in their quadrat, lay them on a piece of paper and count the number they have found – encourage students to crouch or kneel to get closer to the plants - **if it is windy try taping the leaves down or putting them in a pot and bringing them inside**
   c. Pick the habitat they are surveying – they can use the grass and wildflowers habitat flowchart to help them
7. In Part 2 learners move onto the indicator species activity. Before starting the activity, remind learners that **the goal is not to find every indicator species** but just to see which ones you have. They are also not expected to identify everything they find in the quadrat.
8. For each indicator species present, learners estimate what percentage of the quadrat that species covers.
9. If the survey is being done on a mobile device, learners submit their results. If doing it on paper, learners return inside and enter the survey results online.

Reflection

Ask learners to review the total number of plants they recorded and invite them to discuss differences between the quadrats. Did they see different plants in different places? Did they all agree on which plants were different kinds?

Share your findings with the Nature Park science team

Sending in your observations is so important. It helps you track your progress over time towards boosting biodiversity on your site and allows researchers like Dr Victora Burton (left) to study grasslands nationally across the Nature Park.

The survey is designed to account for error amongst young people's observations, so please don't be put off from submitting data because you're concerned about accuracy – we've got it covered.

Using the digital form will automatically submit your results if you are online. If you use paper forms, please ensure you enter them at a computer during or straight after the session. You can view the results on the Nature Park Map.

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