

Our Living Landscape

Grassland Topic Activity Guide: How to Make Hay

Aim of activity

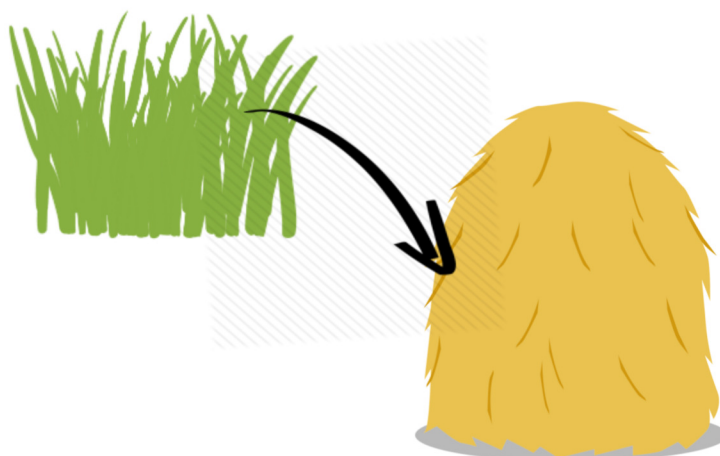
To know how to turn grass into hay.

Resources

Garden or field where grass is growing
A pair of shears
A large bowl or open container
Weighing scales
5 days of sunshine and/or a microwave
Smaller plastic containers and labels (optional)

Delivery of activity

We recommend teachers prepare for delivering this activity by watching our video 'How to make hay' [\[click here\]](#). Bear in mind that a microwave will only take a few minutes to dry the grass but drying the grass outside will take 5 days.



A Step by Step Guide:

1. Introduction

Introduce the activity with a few facts which will grab the children's attention, e.g.:

- Over 40% of the UK is covered by grassland.
- 75% (three quarters) of grass is water.
- Animals which eat only grass and plants are called herbivores.

2. Key points to get across during the activity

- Hay is grass that has been cut, dried and collected. Hay is nutritious and is mostly used to feed animals when fresh grass isn't available.
- Hay is different to straw. Straw is the stalks of cereal grasses, such as wheat or barley, and is not very nutritious. Straw is normally used for bedding to keep animals warm and dry.
- Hay is harvested in the summer and usually stored in bales. It must be carefully dried so it doesn't rot and it must be stored under cover in the right environment to remain dry and nutritious for the animals.

3i) Instructions - Outside in the sunshine

- Watch the weather forecast as you will need 5 dry days
- Cut fresh grass – you will need a minimum of 100g
- Weigh it
- Divide cut grass into smaller plastic containers if pupils want their own hay; label them
- Dry outside (preferably in a high-sided box so that it doesn't blow away)
- Toss around in container twice daily
- Weigh again when grass feels crisp and dry
- Calculate the amount and percentage of moisture and dry matter



And/or

3ii) Instructions - In the Microwave

- Cut fresh grass on a sunny day – you will need a minimum of 100g
- Weigh it
- Microwave it in a bowl (on high) for 1 minute at a time
- Toss grass in bowl and allow to cool for a bit before microwaving for another minute (you want it to dry not cook!)
- Repeat until crisp and dry (ours took 8 minutes)
- Weigh again and calculate the amount and percentage of moisture and dry matter



4. Ask the group to consider the following questions...

Why do farmers make hay?

Farmers make hay to capture the nutrients in grass in a form that is easy to store. Hay can be fed to their livestock (cows, sheep, horses etc) in the winter months, when there isn't enough fresh grass available.

What time of year does haymaking take place?

Hay making takes place during the summer months. It can start as early as May and continue through to the end of August, depending on the climate in each part of the country.

What is silage?

Silage is grass from pastures that has been preserved by 'pickling'. It is made on the farm by compacting (squashing down) a very large heap of cut grass to remove the air from it. The lack of oxygen allows bacteria to break down the sugars in the grass and turn them into lactic acid, which 'pickles' the grass. This helps retain the nutrients during storage over the winter.

How does our landscape change when farmers make hay?

Think about the colour of the fields, the height of the grass, other plants and animals.

Additional Activities and Further Information

- Ted Hughes nature poems: Hay, Cow II, available at: <https://www.fwagsw.org.uk/Pages/FAQs/Category/ted-hughes-poems>
- Grasslands in the UK: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/grassland/>
- Dairy farming: <https://www.thisisdairyfarming.com/>
- Other types of farming in the UK: <http://www.royalcornwallshow.org/education/>
- Countryside learning resources: <https://www.countrysideclassroom.org.uk>