



Taking a soil sample

Who:

This practical task is to highlight the importance of soil sampling to those with little or no knowledge of the subject, or those looking to refresh their knowledge.

Task leader preparation:

- This task will be held outdoors in a suitable field/fields on your farm and should involve all team members who would benefit
- You will require a soil sampling auger or a trowel if you don't have an auger
- A clean empty bucket
- Something to mix the soil such as a trowel
- Clear plastic sealable bags large enough to hold 25 samples

Important:

It's recommended your team complete the first Toolbox Talk in this series 'Soil sampling and pH' before completing this practical task.

TIAH Capability Framework area:

This aligns with the knowledge and skills in the Environment area.
<https://tiah.org/tiah-capability-framework>

Notes:

In **Toolbox Talks 25a: Soil sampling**, participants will have learned what soil sampling and analysis is and how it can help make informed decisions for a management plan that's vital to achieving better land management practices that are profitable and helps to protect the environment. In this practical challenge, participants will discover how to correctly take a soil sample on the farm.

Purpose

The purpose of this practical task is to demonstrate how a soil sample can be correctly taken so that an accurate assessment of the soil's nutrient requirements can be made.

Learning outcomes

By the end of the task, participants will be able to correctly take a sample of soils in preparation for it to be analysed.

Outdoor practical task 30 minutes

The steps for this task are on the follow page, but it's important when collecting samples to remember:

- If you know that different areas of the field perform in different ways, then ask your team to take a representative sample from one chosen area
- Avoid areas near gates, fences, drinking troughs or the headlands
- Avoid any dung or urine patches or where fertiliser or manure or lime have been heaped or spilled in the past.
- For arable land, take a sample down to 15cm – this is related to cultivation depth. For grassland, take a sample down to 7.5cm

Task leader note: You may wish to retain the section at the bottom of this task for staff training and CPD records.

Toolbox Talks Challenge participants

Toolbox Talks Challenge: **Taking a soil sample**

Name of farmDate

Task leader name

Name	Signature	Date

Collecting a soil sample: task

Step 1. Gather in a chosen field and select the area you want to sample. This may be an entire field or a specific area as soil type may vary within the field. You should take 25 samples in total at regular intervals.

Step 2. To take a sample, take the soil auger and insert it into the soil by 6 inches (15cm).



Step 3. Scrape each core of soil into the empty bucket.



Step 4. Mix all 25 samples together in the bucket with the trowel and remove any debris, plant matter, roots or animal droppings as these may affect the laboratory analysis.



Step 5. Carefully pour the sample into the plastic bag or the container bag supplied by the laboratory. It's good practice to include your farm name, the field name and date on the bag. Your sample is now ready to be sent to a chosen laboratory for analysis.



Note: You'll need to walk the field/ area of the field in a 'W pattern. This graphic shows how soil type can vary within the field, so samples were taken in a specific area.

