

APPENDIX 2

COLLECTING YOUR SAMPLES

The laboratory can only determine the quality of the sample as it is received. It is therefore very important how you collect, sub-sample and dispatch your sample to the laboratory.

- **Collect your bulk samples.** Collect your bulk sample early in the week so that it can be received and processed by the laboratory before the weekend. Ensure that the bulk sample represents the feed you are testing, (see below) and free from contamination from soil and leaves etc. For baled hay and silage it is recommended that a sample corer be used to collect your sample. If a corer is not available a 'grab' from deep within the bale or pit is recommended.
- **Thoroughly mix the bulk sample and sub-sample.** Use the mixing, coning and dividing technique shown below to obtain the quantity of sample indicated on the provided sampling bag.
- **Complete the sample submission form enclosed.** This information tells the laboratory who owns the sample and what tests are required.
- **Package and dispatch.** Package the sample and submission form into the prepaid envelop provided and send to laboratory.
 - » Samples with high moisture content (fresh pasture, fresh mown pasture and silage) must be frozen before sending to the laboratory. Once frozen, the sample will remain stable during delivery. The sample should be well wrapped in wet newspaper to minimise defrosting. Sample should be sent to the laboratory by overnight courier.
 - » Samples must not be allowed to heat during storage and transport prior to testing, as they will deteriorate. Never leave samples in vehicles, particularly on a hot day.

HOW TO COLLECT YOUR SAMPLE

Pasture – fresh and fresh mown

Sampling at random by taking between 15–20 'grab' samples across a paddock.



Grab to grazing height or the full depth of the swath or windrow.

Combine all 'grabs' in a bucket and mix well.

Baled hay

Small square bales: 10–20 bales selected at random. One core from each bale, through the 'butt' and at right angles to the surface.

Combine cores in a bucket and mix well.

Large round or square bales: 5–10 bales selected at random. One core from each side of the bale probing at right angles to the surface and at different heights.

Combine cores in a bucket and mix well.

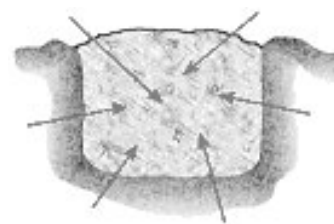
Cubes, pellets, meals and grain

10–15 'grab' samples from the bulk supply or individual bags.

Combine all 'grabs' in a bucket and mix well.

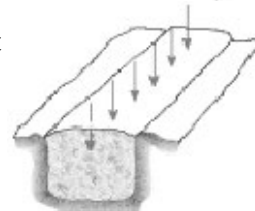
Silage

Bunker or pit silage: 0–15 sites across a freshly cut silage face or 7–10 random sites along the length of the pit. Avoid sampling from only the top 50 cm of the pit.



Combine cores in a bucket and mix well

Baled silage: 10–15 bales selected at random. Two cores from the middle of the curved or one core from each side of a bale probing at right angles to the surface and at different heights.

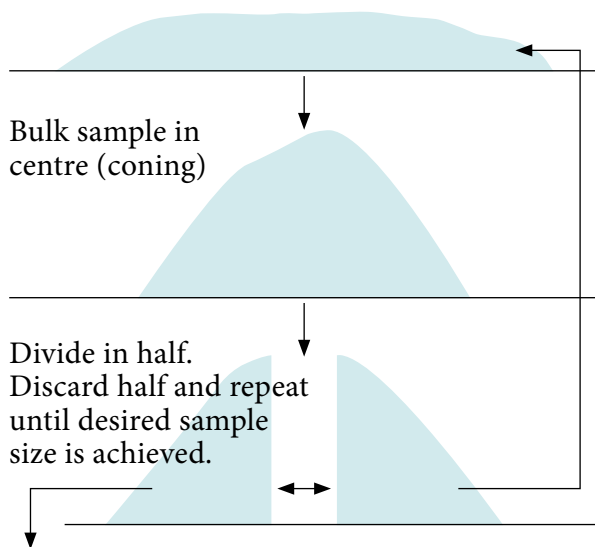


Combine cores in a bucket and mix well.

Sub-sampling

Coning and dividing

Mix sample



Cubes, pellets, meals and grain

Sample corers

Core sampling devices are commercially available or can be made on-farm. A common construction material is stainless steel dairy airline. More sophisticated corers have a removable cutting head, but home-made corers simply rely on scalloping one end of the tube and sharpening with an angle grinder. It is important to keep the cutting surfaces sharp for efficient sampling.

Corers can be manually operated or fitted with an attachment to allow operation with a power drill. In the former case a hole is drilled through one end of the pipe so that a lever/handle can be inserted. **When operating a corer either by hand or by a drill, ensure the corer does not get hot by rotating the corer slowly.** The core can be pushed out of the corer using a length of wooden dowel.

For more information on sample collection, please contact our laboratory on (6938 1999)

References

1. *Fodder Analyst's Laboratory Manual*. Australian Fodder Industry Association.
2. *Successful Silage*. **Top Fodder**. Chapter 12. Authors: Alan Kaiser and John Piltz.