FORAGE
SAMPLING BEST PRACTICES

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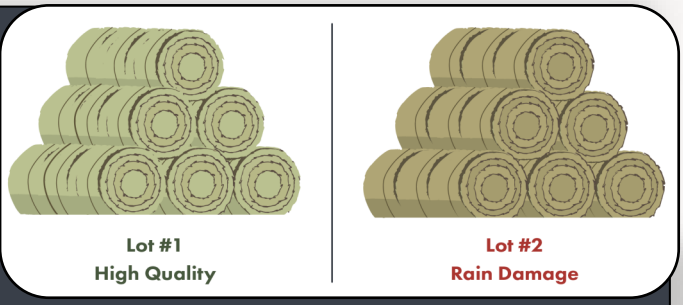
A feed test result is only as good as the sample provided. Follow proper sampling techniques to ensure an accurate test result.

Group Forage To Be Sampled Into Lots

Group and collect forage samples in lots, which could be based on forage maturity, variety, harvest date, a single field or a single cutting.



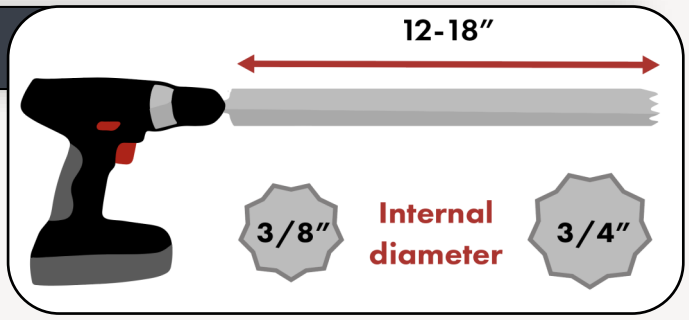
Sample at the Right Time

Collect samples **when management decisions are being made** or as **close to feed-out** as possible. For ensiled forages, collect samples during harvest or wait a **minimum of four weeks after ensiling** before sampling.

Use the Right Tools

- Forage probe
- Clean container for collecting samples
- Plastic sample bags
- Clippers (for standing or swathed forage)

Work with your nutritionist or local extension office to obtain a forage sample probe.



Sample at Random

Collect samples at random for each forage lot. DO NOT avoid bales that appear below average or areas in a field with poor forage cover.

Allow Time for Sample Turnaround

Allow a minimum **two-week turnaround** time from when you collect samples and receive lab results.

Label Samples Properly

Clearly label samples with farm name, forage type, date collected, plus lot number or description. Contact your laboratory for further labelling instructions.

A list of Canadian feed testing labs is available at: BeefResearch.ca/labs.

Scan for list

Use the Test Results

Work with your nutritionist or input feed analysis results into ration-balancing software to **formulate balanced feed rations** for your herd.

CowBytes ration-balancing software is available for purchase at CowBytes.ca.

CowBytes.ca

Version: 01.2024

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Type of Forage	How should I sample?	How many samples?	How do I handle samples correctly?
Dry, baled forage			
Round bale	Core samples using a forage probed inserted from the curved side of the bale.	Cores from 20 bales (one per bale)	• Combine core samples in a clean plastic bag. Do not subsample. • Store in a cool location away from direct sunlight until shipping.*
Square bale	Core samples using a forage probe inserted at a 90-degree angle from the end of the bale.		
Silage			
Fresh	• Hand-grab samples directly from the wagon or truck as fresh chopped forage is unloaded. • Place sample in a clean pail with a lid and keep in a cool location.	Two to three small hand-grab samples from each load	• Avoid sampling silage that is mouldy or has been exposed to the air for too long. • After all samples are collected in a clean container, mix and take a composite subsample for analysis. • Remove air from plastic sample bags and store in a freezer until shipping.*
Tower silo	• Hand-grab samples of fresh silage after silo unloader has run for several minutes. • DO NOT sample from the two or three feet of spoiled silage at the top or bottom of the silo. • Take caution to avoid hazards; equipment should be turned off before grabbing a sample.	Eight to ten hand-grab samples	
Bunker silo	• Hand-grab samples from fresh silage that has been scraped or shaved from the bunker face. • DO NOT take samples directly from the face as it presents a safety hazard.		
Bagged silage	• Hand-grab samples from across the face following a W or M pattern. • Core samples along the sides of the bag. Tape holes in the plastic after sampling to reseal.	Eight to ten hand-grab or core samples	
Other forage			
Swaths	Whole plants from 10-20 locations throughout the field, considering high spots, low spots, wet spots and fence lines.	Three to five whole plants from each sample location	• Chop forage into one-inch to two-inch pieces, mix and collect a composite subsample for analysis. • Store sealed plastic sample bags in a freezer until shipping.*
Standing forage	Clip forage at harvest or grazing height from 10-20 locations throughout the field. Consider high spots, low spots, wet spots and fence lines.	One square foot of forage from each sample location	

*Send samples to the lab as early as possible in the week to prevent samples from sitting in a warehouse too long.

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