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Forage Fact # 18

Feed Samples: Only as Good as the Sample You Take!

Taking Feed Samples

1. Sample by lots – feed that is from same field...
2. Use a core sampler for bales & stacks
3. Take at least 20 cores one per bale
4. Cores should be at 12-15 inches deep
5. Use Ziploc bags & clearly label

To Borrow feed probes:

Peace River Forage Assoc:

Julie Robinson

(250) 782-2745

Crop Insurance

Lee Bowd

(250) 784-2238

Info on taking your feed samples call:

* Jim Forbes

(250)787-3240

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Why Bother With Feed Testing?

Feed is one of the largest expenses incurred on a livestock ranch. Knowing the quality of your feed allows you to maintain desired level of health, growth and weight gain in your livestock. Evaluating feed quality without a laboratory analysis can be misleading.

Sensory evaluation you can do on hay and other feeds may include:

- Stage of maturity
- Ratio of legumes to grass
- Ratio of leaves to stems
- Colour - bleached or green?
- Odour - smell musty?
- Presence of weed seeds

When done properly feed testing can tell you the rancher a lot about the quality of your feed. Knowledge of the quality of feed helps determine the right amount to feed and when to feed it.



Lee Bowd sampling hay bales at Double M Ranch. Thank You Lee for your help with our nutrient trials!

Sampling Bales & Silage

First identify your forage inventory and sample by lots. A forage lot is hay or silage taken from the same location, field, with the same maturity at cutting and similar mixture of grass, weeds and rain damage.

Use a core sampler to collect the forage sample from bales or stacks. A core sampler is a sharpened tube that collects a more accurate representation of the actual proportions of leaves and stems than a "grab sample".

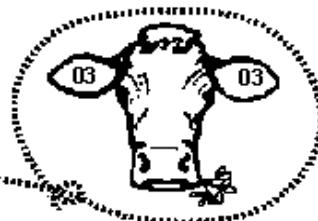
When sampling bales and stacks of hay, take at least 20 cores, one per bale from

widely separated bales or stacks representative of the lots being sampled. Sample square and round bales 12-15" deep. Sample stacks & chopped hay 18" deep.

Mix the collected cores of dry hay in clean plastic pail. The accumulated core samples from one lot will be approximately 1 quart in volume and place entire sample in a clean plastic bag. Seal to maintain sample moisture and clearly label bag.

Silage samples require similar procedure using a 3 foot long probe. Take 20 samples per lot of silage. Remembering that different timing and forage mixtures change quality of silage feed.

**Peace River Forage Association
of British Columbia**



Thank you Tom Pittman, a past District Agrologist in Fort St John, for his forage expertise over the years.



Penn State auger or drill in probe with different drill ends.

“A local producer built his own sampler with galvanized pipe and his samples showed extremely high levels of zinc.”
Jim Forbes



Star Multi-Forage Samplers: Shoulder & T-bar -push types.

Forage Feed Probe

Using a sampling probe is absolutely necessary, so here is some hay probe advice and information.

Buy, borrow or build a probe. If you are going to build a sampler use the right materials — stainless steel is more expensive but will not taint the sample.

Homemade

Golf club shafts, ski poles, cut-off soil probes, steel tubing, or conduit. Sharpen one end and modify the other to improve leverage with hand brace or drill attachment. Caution: the small diameter of golf club or ski pole might slip past some stem material rather than cut through it, resulting in misleading sampling and test results.

There are two basic types of probes you can buy. One is a push in type, either with a padded shoulder push or a T-Bar brace type. The other type is an auger or drill type tester.

Penn State Forage Probe

Phone: 1-800-558-9595.
 Approx. \$110 plus shipping

Star Quality Samplers

Phone: 780-434-336.
 Approx. \$150 plus shipping

**Prices depend on type of probe

Sending Feed Samples

Make sure your samples are clearly labeled, contact labs for current prices.

Griffin Laboratories

Unit 2-2550 Acland Rd.
 Kelowna BC, V1X 7L4
 Phone: 1-800-661-2339
www.grifflabs.com

Norwest Labs

3131—1 Ave South
 Lethbridge, Alberta, T1J 4h1
 Phone: 403-329-9266
www.norwestlabs.com



Jim Forbes, previously Dawson Creeks District Agrologist, interpreted feed analysis. Thanks Jim for your years of forage expertise.

Summary

After talking with Jim Forbes about feed testing and how important it is to sample correctly, we compiled a list of the points producers need to know:

1. If you are going to feed test DO IT RIGHT - a poor sample is almost as bad as no sample.
2. Group feeds into lots when sampling.
3. Sample 5-10% of the bales in a lot (at least a Ziploc sandwich bag full).
4. Get mineral levels done at the same time - costs a little more but it can help avoid very costly problems.
5. Getting your rations balanced is a must for an efficient operation.
 - * Do it yourself - take a home study course and use a computer program like COWBYTES.
 - * Utilize the nutritionist where you buy your feed, the cost of this is already factored into your feed so take advantage of it.
 - * Hire a nutritional consultant if you are sourcing your own feedstuffs.

Compiled by: Jim Forbes and Julie Robinson in Fall of 2002

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