

PRODUCTION TECHNOLOGY

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How to Collect a Good Forage Sample?

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Why Is Hay Sampling Important?

Sampling hay and forage is of tremendous importance to assure an accurate forage test. A lab test is only as good as the sample provided to the lab. In practice, hay sampling produces more variation in results than does lab error. Here's the dilemma: Thousands of pounds of highly variable plant material must be represented in a single, tiny thumbnail-sized sample!! This sample must not only represent the proper leaf-stem ratio and the legume/grass mix, but also reflect the spotty presence of weeds. Sampling variation is a common problem in hay testing, and causes millions of dollars in lost revenue each year. However, if sampling protocol is carefully followed, sampling variation can be reduced to an acceptable level, and the feed quality successfully predicted.

Steps For Hay Sampling:

- Identify a single 'lot' of hay. A hay lot should be identified which is a single cutting, a single field and variety, and generally be less than 200 tons. Don't mix cuttings or fields.
- Choose a sharp coring device. Use a sharp coring device 3/8-3/4" in diameter. <u>Never</u> send in flakes or grab samples.
- Sample at random. Walk around the stack—try to represent all areas of the stack. Don't avoid bales or select certain bales. Choose bales at random.
- Take enough cores. We recommend a minimum of <u>20 cores</u> for a composite sample to represent a hay lot. Take more than 20 cores in highly variable lots, e.g. weedy fields.
- Use proper technique. Sample butt ends of hay bale, between strings or wires, not near edge. Probe should be inserted at 90° angle, 12"-24" deep. On round bales, sample towards middle of bale.
- Handle samples correctly. Seal Composite sample in zip-lock plastic bags and protect from heat.
- Not too big, not too small. Sample so that you produce about 1/2 lb of sample. Too-small samples don't fairly represent the variation in the hay lot. Very big samples (common with large probes) cannot be easily ground by the labs.
- Choose a NFTA (National Forage Testing Association)-Certified Lab. To be certified, labs must
 match the true mean within an acceptable range of variation. NFTA labs have demonstrated their
 commitment to good results.

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