

FOR IMMEDIATE RELEASE

**Contact:** Gene Schmitz  
Livestock Specialist  
University of Missouri Extension  
(660) 438-5012  
schmitze@missouri.edu

**Date:** 7/19/17

**Headline: Hay Sampling Techniques**

**WARSAW, Mo.** – In the past, I’ve spent a lot of time discussing the importance of hay testing to determine appropriate feeding programs. I’ve not spent much time discussing how to actually collect the samples. Many producers are concerned about hay quality this year, so a quick discussion on sampling techniques is warranted.

Collecting the sample is the first step. Use a hay test corer to get a cross section of the bales being sampled. Hay corers can be used with either electric drills or hand braces. Sample the bale from the side, not from the end. It will take some pressure to get the corer driven into the bale. Moisture and bale density will impact the force needed to push the corer into the bale. Most hay test corers are 18 to 24 inches long. Try to get the corer as deep into the bale as the corer is long. This ensures sampling a good cross section of the bale at various depths in the bale.

As with sampling any product, the results will only be as good as the sample that is collected and sent to the laboratory. I recommend sampling 10 to 12 bales from each lot of hay that is being tested. This could be from a specific cutting, specific field, different forage species, etc. Collect samples from the entire pile or line of bales to ensure bales from various places in the field are being sampled. Bringing a round bale or flake of hay to the Extension office for sampling is not a representative sample.

Place the collected sample from each bale into a clean container. All samples collected from a lot of hay can be put into the same container. Thoroughly mix the samples and pull a sub-sample to send to the laboratory. I use quart size freezer bags and fill them 2/3 full.

Many hay corers come with a wooden dowel fitted with a rubber stopper to push the sample out of the corer. Since the tip of the hay corer may be sharp and serrated, it is wise to keep your hand on top of the rubber stopper when pushing the sample out of the tube. This will prevent cuts and possible trips to the hospital for stitches.

Once the sample has been collected and placed in the freezer bag, be sure to mark the bag with your name and sample identification.

Many commercial labs provide forage analysis services. Each of these labs will have a form to submit along with the sample. Be sure to fill out the form carefully. Include information about the sample, such as cool-season grass hay, grass legume mixed hay, warm-season grass hay, legume haylage, etc. Some labs also request the species of animal the forage will be fed to.

Selecting which test to have the lab run is the last decision. If it is a common forage, I generally recommend tests that provide information on protein, energy and a few major minerals. For a few dollars more, a more extensive test with additional information on fiber analysis and trace minerals may be warranted. Test packages and costs vary from lab to lab, but generally range from \$15 to \$25 depending on the analysis being requested.

Most MU Extension offices have hay probes or at least access to this equipment. Many will have information and forms from several labs. If you have additional questions on hay testing, collecting, or submitting samples, contact me at [schmitze@missouri.edu](mailto:schmitze@missouri.edu) or by calling the Benton County Extension Center in Warsaw at (660) 438-5012. Your local MU Extension Center will also have information on hay testing. Hay testing is not hard, but the information is only as useful as the sample collected and analysis requested.

##