

Hay Probes

Choosing a proper hay probe is important for proper forage testing technique. There is a choice of either power-driven or hand-powered probes.



(Above are examples of hand held and power drills)

Sampling techniques:

The largest factor in 'variability' of nutrient analysis is **Sampling technique!**

Below is a list of 'hay sampling practices' that affect 'variability' of nutrient analyses.

Sampling equipment:

Hay should be sampled by coring the bales of hay with a hay probe. *It is **NOT** recommended to take a 'grab' sample or to send flakes of hay to the lab.*

Depth of coring: Use a probe that travels 12 to 24 inches into the hay bale. The internal diameter of the probe should be 3/8 inch (*fill a 1-quart Ziploc bag 3/4 full with 10 Cores, and then get another one!*).

Condition of equipment:

- The probe tip must be sharp (*A dull tip may reduce the amount of stem material due to the tip sliding past rather than cutting the stem*).
- Sampling method (how the sample is obtained)
Random vs. non-random sampling: In order to get a representative sample of a hay stack, there can be no pre-chosen reasons (*non-random*) for selecting a sampling location (*such as color, leafiness, or location*)

Techniques to avoid non-random sampling:

1. Sample every 4th or 5th bale in a stack or field of hay.
2. Take 6 to 10 samples randomly on all 4 sides of the stack of hay.

Method of obtaining samples:

1. Sample the end of the bale (not the sides) and between strings.
2. Take 1 core sample per bale.
3. *Square bales* - Insert probe at a 90° angle into the bale. 4. *Round bales* - Insert probe towards the center of the bale.

Sample the hay as close to feeding or point of sale as possible.

Amount of "hay cores" taken: It is recommended to take enough cores to fill a **1-quart Ziploc bag ~3/4 full of hay.**



(Above: Dr. Dan Putnam shows the location of where to sample a round bale.)



(Above: Dr. Dan Putnam shows the location of where to sample a square bale.)

Sample handling:

1. Place in sealed plastic bags (***Pre-labeled bags are available at Ag Health Labs.***)
2. Do NOT split a sample „prior to grinding“ (***Ag Health Labs will grind and split samples upon request!***)

Please refer to our Ag Health Labs Newsletter from [July 2011](#), for more information.



Where to Purchase a Hay Probe

AMS Hay & Forage Probe

105 Harrison Street
American Falls, Idaho 83211
Phone: (800) 635-7330
Website: <http://www.ams-samplers.com>

Best Harvest Hay

4115 7 Mile Rd
Bay City, MI 48706
Phone: 888-947-6226
Fax: 206-339-7334
Email: sales@bestharveststore.com
Website: <http://bestharveststore.com>

Colorado Hay Probe

Contact: UDY Corp.
Phone: (970) 482-2060
Website: <http://www.udyone.com/hayprobeinfo.htm>

Forageurs Hay Probe

P.O. Box 564
Lakeville, MN 55044
Phone: (952) 469-2596

Frontier Mills 'Yankton' Hay Probe

2002 South Dakota Highway 314
Yankton, SD 57078
Phone: (650) 665-2441

Hay Chec Hay Sampler

A.M. Hodge Products, Inc.
P.O. Box 202005
San Diego, CA 92120
Phone: (619) 444-3147

HMC Hay Probe

Hart Machine Co.
1216 SW Hart St.
Madras, OR 97741
Phone: (541) 475-3107

Oakfield Probe

P.O. Box 65
Oakfield, WI 53065
Phone: (920) 583-4114
Website: <http://www.soilsamplers.com/>

Nasco Corporation

4825 Stoddard Rd.
Modesto, CA. 95356-9318
Phone: (800) 558-9595
Website: <http://www.enasco.com/>

Sierra Hay Probe

9450 E. Collier Rd.
Acampo, CA 95220
Phone: (209) 333-3337
Website: <http://www.sierratestingservice.com/>

Star Forage Probes

5719-114A Street
Edmonton, AB, Canada, T6H 3M8
Phone: (780) 434-3367
Website: www.starqualitysamplers.com

This is a list of possible places to purchase a hay probe. It is not an endorsement of each companies hay sample probes. Please contact our lab for more information.

