

NEW SAMPLE BAGS – The Northeast DHI Forage Lab has recently introduced new sample bags with a “write-on” strip. These bags have never before been available in this size and were custom manufactured for DHI through NASCO, the nationally known farm supplier. Pencil, ballpoint pen or magic marker can all be used to mark these bags, with the latter two working the best. This convenient write-on strip will allow you to quickly and easily identify samples as they are being taken. Let us know what you think about these new bags. Your input is appreciated.

Also available:

- **Multi-Sample Information Sheet:** for use when 2 or more samples are to be sent to the same address. It provides the convenience of having to fill out only one information sheet for several samples instead of one information sheet per sample. Please be sure to number the sample bags and use that number to identify the sample on the sheet.
- **Bulk Postage Mailing Labels:** All samples that are sent individually via U.S. Mail to the lab incur a \$1.00 postage-paid mailer (PPM) charge. Thus, 10 samples mailed individually would require \$10.00 in PPM charges. You can save money by using the Bulk Postage Mailing Sticker. By packaging all 10 samples together in one box and attaching the Bulk Postage Sticker, you pay only \$1.00 for the entire box. This is a savings of \$9.00. There is no limit on the number of samples that can be packaged together and the charge is still only \$1.00. Cartons are also available from DHI.
- **Mailing Labels:** “peel and stick” labels with your name and address are available. These stickers may be placed on information sheets and save you the time of filling in your name and address.

For more information about these services, please contact the Forage Lab Customer Support Department at 607.257.1272.

PASTURE – pasture season is rapidly approaching. The “rebirth” of pasture and interest in rotational grazing in the Northeast has put a whole new perspective on summertime feeding. While the old “14% Pasture Mix” may still suffice on some farms, other dairies are going to present you with more challenging feeding programs. Pasture is forever changing. Early season and intensively rotated pasture provide a high energy, high protein, low fiber, high protein solubility forage that is conducive to milk production and often detrimental to butterfat test. Anyone who has tried balancing feeding programs during the summer knows first hand about the “butterfat blues”. Increasing the fiber level by top dressing beet pulp, soy hulls or other high fiber sources, or including them in the grain mix may help. Feeding 5 to 6 lbs. of hay per head per day is advisable, and buffers may be beneficial.

The data in TABLE 1. is from a study done at the Miner Institute in Chazy, New York during 1982.

TABLE 1. Seasonal variation in pasture composition (DM Basis) in 1982*

Date	Dry Matter (%)	Dry Matter Yield (lbs./A)	Protein (%)	Acid Detergent Fiber (%)	Ca (%)	P (%)	Mg (%)	Legume (%)
5/20	23.8	3311	19.8	26.0	0.64	0.36	0.23	10.5
6/03	28.4	5138	15.2	33.6	0.37	0.32	0.21	8.1
6/21	28.0	3327	14.1	35.8	0.44	0.29	0.16	8.9
6/30	31.2	3163	14.0	36.6	0.35	0.30	0.14	8.6
7/15	37.8	2652	13.0	43.1	0.49	0.30	0.16	10.0
7/30	33.5	2525	13.9	36.2	0.56	0.29	0.21	5.6
8/15	31.6	3457	13.8	38.1	0.43	0.39	0.20	9.4
9/09	33.2	4711	17.2	35.9	0.52	0.34	0.18	11.6

TABLE 2. Ranges of values in TABLE 1.

Constituent	Range
DM Yield (lbs/acre)	2525 – 5138
CP (%)	13.0 – 19.8
ADF (%)	26.0 – 43.0

These data illustrate that both the quantity and quality of the pasture change over time. During times of low DM yield, more supplemental forage will have to be provided. Changes in the nutrient composition will require altering the grain portion of the ration in order to optimize milk production. Pasture samples analyzed by DHI have ranged from less than 10% to greater than 30% CP.

To help encourage analyzing pasture, dairy farmers who are Northeast DHIA members should go to their DHI calendar and look for the May coupon. We are offering a pasture NIR analysis for \$8.70. So get the jump on summer feeding programs and begin analyzing those pastures early. Follow up with subsequent tests to monitor pasture quality and keep the feeding program tuned.

SAMPLES OF THE DAY – The Northeast DHI Forage Lab receives a wide variety of samples that range from the most common corn silage to truly extraordinary by-products and less typical plant species. In the last issue we examined some samples from Hawaii. This issue brings us back to the mainland. The week of 3/20 provided us with a pair of samples from Texas that we do not typically think of as animal feedstuffs here in the Northeast. Both samples were from Kent Mills of Snyder, Texas. The first sample was Blueberry Juniper. We knew this sample was special right from the start. Grinding the dried sample produced a highly aromatic odor that can best be described as an “off pine needle” smell that immediately spread throughout the lab and began to permeate other areas of the building. Not only was it pungent, but the odor remained with us for the rest of the day. Needless to say, it caused quite a stir in the building, once again making the forage lab a very “popular” place in everyone’s eyes (if not their noses).

Odd samples always spark our interest, and it’s just one of the aspects that makes the feed analysis business interesting. So I called Kent to get the inside story on the blueberry juniper. Apparently, Angora and Spanish goats consume it out on the range. The goats are natural browsers and consume a variety of plant life. There are essentially 2 types of juniper in the area that Kent serves: red berry and blueberry. The juniper is available year around, but is most popular in the fall when the berries ripen. The berries are about 3/16” in diameter and are also consumed by the deer and raccoons.

Some producers report that the goats will seek out the juniper after a cold front moves through the area. There is some speculation that the leaves contain an alcohol like substance that serves as a readily available energy source. This has yet to be proven, but is interesting nonetheless. Other producers note no preference one-way or the other.

The second sample was partially dried prickly pear cactus. A recent brush fire destroyed 80% of the grassland that was being utilized by cattle for pasture. With the spines burned off, the cattle apparently will utilize the cactus as a feed source. In fact, in some areas, a “pear burner” (which is essentially a flame thrower) is used to burn the spines off the 4 to 5 foot tall cactus to provide additional feed for the cattle. Kent noted that he has seen the cactus test better for crude protein than was seen in this sample, but attributed the poor test to the fact that the prickly pear was sampled about 3 weeks after the fire and was on the “dry and tough” side.

The sample analyses are presented in TABLE 3. Of particular interest is the calcium level in both of these plants, especially the prickly pear. The calcium content of 16.8% was double checked and confirmed. A book value for the total ash content of prickly pear is 20.1% on a DM basis. Thus, it appears that the cactus contains almost half the calcium content of common limestone, but there remains the question of availability.

Keep those samples coming in. The unusual samples are as interesting to us as they are challenging to you as you try to build a feeding program around them.

Special thanks to Kent Mills for the samples and information he provided.

TABLE 3.

	Blueberry Juniper	Prickly Pear Cactus
DM, %	55.1	60.9
CP, %	8.1	2.2
ADF, %	35.9	11.2
Ca, %	2.10	16.8
P, %	0.13	0.03
Mg, %	0.13	0.36
K, %	0.54	0.85
Na, %	0.026	0.002
Fe, ppm	483.0	35.0
Zn, ppm	25.0	7.0
Cu, ppm	5.0	2.0
Mn, ppm	50.0	48.0
Mo, ppm	<1	1.6
S, %	0.11	0.04
All results are expressed on a DM Basis.		