

**WATER ANALYSIS** – to ensure the best possible results we strongly recommend that water samples arrive at the lab as soon as possible (preferably within 24 hours). Samples that arrive at the lab after spending several days in non-refrigerated transit may result in suspect nitrate readings. Bacteria in the water may utilize nitrates and lower the analytical results. If at all possible, personally bringing the sample to the lab is the best route to take. A good alternative is to contact your local DHI supervisor or region manager for information regarding the DHI pick-up point nearest you. Water or forage samples left at the pick-up point can be refrigerated and will travel via refrigerated truck to the lab.

**SIX STATE DHIA MERGER** – We're growing! On December 3, 1987, the 63 member delegate body of the New York Dairy Herd Improvement Cooperative voted unanimously to unite the States of New Jersey, New Hampshire, Connecticut, Massachusetts, Maine and New York into the FIRST regional DHIA with a centralized management system in the U.S. The new organization becomes effective on April 1, 1988 and will be called the "Cooperative Northeast Dairy Herd Improvement Association, Inc.", working under the trade name of Northeast DHIA. We will be serving over 7,000 farmers that will provide a base of approximately 500,000 cows.

**FORAGE LAB HAS NO BORDERS** – the Forage Lab not only provides service to the six member states, but also to the entire U.S. (including Alaska and Hawaii) and several foreign countries. Samples from Canada, Colombia, Costa Rica, Puerto Rico, Mexico, Greece and most recently Japan have all been analyzed by the DHI Forage Lab. Of particular interest to the lab staff are the Colombian samples. We all wonder what type of animals are being fed and how content they are afterwards.

This past summer, we received a pair of grass samples from Hawaii with the following average analysis as compared to an average DHI grass analysis.

Table 1.

	Hawaiian	DHI Average
CP	12.8	10.4
Adj. CD	12.8	10.4
ADF	37.2	41.5
TDN	63	59
NEI	.53	.46
Ca	.20	.53
P	.29	.25
Mg	.25	.21
K	3.10	1.70
Na	.74	.012
Fe	233	139
Zn	28	17
Cu	12	8
Mn	45	59

Note the high K and Na and low Ca values. These values were questioned and confirmed by retesting. We called the farmer to discuss his results and came to the following conclusions: 1)the potassium value is high due to intense fertilization practices involved with rotational grazing and 2)the sodium value is elevated due to salt spray from the ocean. The biggest surprise was the type of animals being these forages – American Bison. He raises about 160 head on 80 acres of rotational pasture. The bison are raised for their lean meat which brings a good price. Try to picture the buffalo grazing lush pastures beneath a volcano with the palm trees swaying in the breeze. January sounds like a good month to pay a farm call for a professional consultation.

**FORAGE TRIVIA** – match the item on the left with the information on the right.

- |                     |   |
|---------------------|---|
| 1. 10               | a. Medicago sativa  |
| 2. Anthracnose      | b. causes the conversion of hemoglobin to methemoglobin, thus decreasing the oxygen carrying capacity of the blood. |
| 3. 14.7             | c. results from low blood Mg. levels  |
| 4. Reed Canarygrass | d. gramines decrease palatability and tryptamine carboline produce diarrhea.  |
| 5. Alkaloids        | e. may be responsible for cyanide or nitrate toxicity.  |
| 6. Sudangrass       | f. typical storage loss (%) for large round bales stored outside unprotected.                                       |
| 7. Nitrites         | g. gaseous loss (% of DM) from uncovered trench or bunker silos.  |
| 8. Alfalfa          | h. known for its alkaloid content.  |
| 9. Grass tetany     | i. fungus disease favored by hot, moist weather.  |
| 10. 19.2            | j. typical feeding loss (% of DM) for large round bales stored outside unprotected.                                 |

**Answers:**

(1. g) (2. i) (3. f) (4. h) (5. d) (6. e) (7. b) (8. a) (9. c) (10. j)