

Examine alternative dairy cattle feed

NEWARK, Del. — Potential forage shortages this winter as a result of last summer's drought have many dairy farmers wondering about economical feed alternatives. University of Delaware extension dairy specialist George Haenlein says there are several possible choices including wet brewers' grain, wet corn gluten, corn stalks, drought-stressed corn silage, alfalfa pellets and cubes, urea, liquid whey or even treated straw.

Following are some factors to consider when deciding whether to use one of these as dairy feed.

Wet Brewers' Grain is a good possibility. Cows can be fed 30 to 40 pounds per day, or 25 percent of their total ration dry matter. If corn is worth \$7 per 100 pounds and 49% soybean oil meal is worth \$14 per 100 pounds, wet brewers' grain at 80% moisture is worth \$39 a ton. "Be sure to use it up before mold develops and palatability drops, however. Usually it keeps well one week," Haenlein says.

Wet Corn Gluten can be fed at the same rate as wet brewers' grain. Watch prices to be sure wet feeds are a good buy. Check dry matter levels in wet feed.

Corn Stalks are an effective forage stretcher, but only for low producing cows, dry cows and older heifers, the specialist says. However, a sound mineral and vitamin program is necessary. If stalks are harvested immediately

after the combine or picker has gone through the field, moisture levels may be adequate for ensiling. Low calcium and energy levels of this feed can be pluses in a dry cow program. However, stalks must be free of soil in order to be palatable.

Drought-Stressed Corn contains 75 to 95 percent of the energy of normal corn silage, while its protein content may be proportionally higher. Test it for correct ration balancing of energy and protein needs.

Alfalfa Pellets and Cubes can replace half of the forage dry matter if the remaining forage is long enough, Haenlein says. Secure a guaranteed protein and fiber analysis to determine pellet quality. Also compare the price of pellets or cubes with current hay prices. Some alfalfa pellets may even substitute for grain. Usually they are an excellent feed for high producing cows.

Urea can be used to cut the protein bill for older heifers, dry cows and low producers. Feed a maximum of 0.4 pound of urea per adult animal per day. This can replace one pound of 48% soybean oil meal. Don't feed urea to high producing cows because of a possible drop in feed intake and milk production. Always adapt animals to urea very gradually over several days or possibly weeks, the specialist advises.

Liquid Whey is another good

alternative, he says. But it is low in dry matter, which increases the nutrient cost per pound if delivery costs must be considered. Cows may drink 100 to 200 pounds of liquid whey a day, which contains 6 to 12 pounds of dry matter. Liquid whey must be readily available, fed fresh each day and gradually introduced into the diet. It is relatively high in protein, sugar and minerals.

Straw is also a possibility, but it is low in feed value and digestibility unless treated with anhydrous ammonia to break down the lignin barriers to cellulose. Otherwise it is mainly used as a bulk and fiber source in dairy rations. Treating big straw bales with ammonia inside plastic bags is a popular practice in Norway, yielding palatable feed with a nutritive value close to hay, Haenlein says.

Besides looking at alternative feeds, he suggests dairy farmers take care to use existing feed supplies correctly.

Test forages routinely. Balance and reevaluate cow and heifer rations routinely.

Challenge-feed cows that are producing the most milk.

Make sure good cows in early lactation are not underfed.

Consider bulk purchases of grain and commercial supplements.

Lock in prices on commercial supplements, if possible and economical.

Shop around for good buys.

Calculate cost per unit of nutrient when comparing feeds.

Conduct an inventory to determine if you have enough feed on hand to meet herd needs over the winter.

Cull marginal cows and heifers, using DHI records.

Dairy and other livestock producers who wish to learn more about feed management are en-

couraged to attend the winter forage meeting of the newly organized Maryland-Delaware Forage Council, Friday, Dec. 9, from 9 a.m. to 2:30 p.m. at the Hartly Fire Hall in Hartly, Delaware. Advance reservations can be made for \$6 through county extension offices in Delaware and Maryland. Registration at the door will cost \$7. A buffet lunch will be served at noon.

Barley is valuable feed

NEWARK, Del. — High corn prices have many dairy farmers looking for alternative energy sources for their herds. Barley is often a good, cheap source, says University of Delaware extension dairy specialist George Haenlein.

Although its total daily nutrient level is slightly lower than shelled corn (83 percent versus 88 percent on a dry matter basis), barley's protein content is slightly higher (13 percent versus 10 percent). Both corn and barley normally are priced on a volume basis, which makes them hard to compare since a bushel of shelled corn weighs 56 pounds and a bushel of barley weighs 48 pounds.

Using the following equation, Haenlein says producers can estimate what barley is worth relative to shelled corn and 44%

soybean meal:

Barley (\$/T = (\$/T) × .908]

[Soybean meal (\$/T) × .093]

At \$110 a ton for corn and \$220 a ton for soybean meal, barley would be a good buy at \$120 a ton or lower, the specialist says. In most cases barley costs less than this. If economical, it can be used to replace corn partly or totally. Some adjustment would have to be made for barley's slightly lower energy value, however.

High moisture barley is similar in feed value to high moisture corn. It should be about 28 percent moisture when ensiled. Make sure it is crushed or adequately rolled before feeding. Ideally, whole barley should be stored only in a limited oxygen silo, the specialist says.

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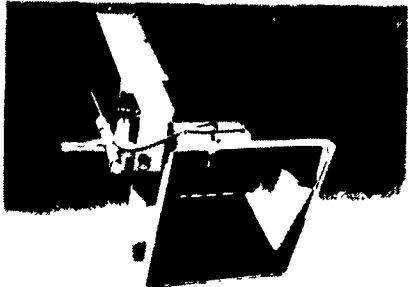
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Dairy bauxite exchange

KINGSTON, Jamaica — The United States and Jamaica have signed a barter agreement for the exchange of \$13.6 million worth of U.S. dairy products for Jamaican bauxite of an equal value.

This marks the second such agreement between the two countries since February, 1982, when \$13 million worth of dairy products and bauxite were exchanged.

Under the new agreement, the United States will exchange 11,340 tons of nonfat dry milk and 2,855 tons of butteroil for 400,000 tons of bauxite, according to Melvin E. Sims, general sales manager and associate administrator of the U.S. Department

of Agriculture's Foreign Agricultural Service.

Sims said the agreement will benefit both countries. "It provides an outlet for U.S. government-owned dairy products and contributes to our national defense posture while contributing to Jamaica's strategy of relying on production and exports to fuel its economic recovery," he said.

Bauxite is the basic raw material used to produce aluminum, a significant component in military weapons and aerospace systems.

Delivery terms for the dairy products are free along side (f.a.s.) U.S. Gulf ports; the delivery period is through September 1984.

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