Grass-Based Dairy Farming in the Upper Midwest – Where do we go from here?

by Matt Stewart, Oelwein

Cows Grazing in North East Iowa

The grazing movement is at the end of its first stage of development. The "introduction" stage has brought fencing, watering systems, and grass-based animal systems. An infrastructure has been developed to supply farmers with fencing and watering supplies. Extension and NRCS have become fairly proficient at helping farmers institute managed intensive grazing systems and organizing pasture walks and grazing conferences. Grass farming has been embraced by sustainable agriculture groups, as grazing has the potential for a reduction of soil erosion and relies less on chemicals and petroleum. But the movement has stalled. I think we need to investigate the reasons.

LACK OF FINANCIAL INCENTIVE - Grass-based dairying has grown in spurts associated with periods of financial stress on dairies. The first leap of interest came about between 1987 and 1989. Many of Wisconsin's first grazing groups started after a drought in 1988. The second wave of interest in controlled grazing came in 1993-1995; dairy farmers experienced six years of low profitability between 1990 and 1995. $5 corn and $8 soybeans slowed the influx of new graziers and made row cropping look like a rosy alternative to pasture. At the same time, graziers anxious to profit after seeing good returns from their first efforts, expanded grass acres and herds. Then they had trouble keeping pastures from growing too mature. The widespread "gospel of grass" stated that no purchased seed, chemicals, or fertilizers would naturally yield lush pasture if farmers would just use managed intensive grazing. But pasture production of high quality feed has not grown in terms of more meat or more milk per acre as many believed.

Radiance Dairy cows grazing

Both confinement and grass-based dairies have had very profitable years in 1998 and 1999 as a result of milk prices. It's important to realize that those profits have come from selling milk, not necessarily from the production of grass. The toughest years in agriculture often follow a period of high commodity prices. Look at corn after the high prices of 1973-1974, milk after the high prices of 1989-1990, or hogs after a 16% return on investment between 1990-1995. Dairy graziers will face a problem caused by the low cost of concentrates. My feed cost per cwt. of milk is $2 less this winter as a result of purchasing a year's supply of corn at $1.55 and a winter's supply of hay at $55 per ton. Grass farmers need to realize that low feed prices will actually benefit confinement dairies more that grass based producers.

LACK OF INFRASTRUCTURE TO INCREASE PASTURE PRODUCTION – Two main topics are included here: 1) grass and legume genetics, and 2) balancing soils and pasture fertility. The next ten years of the grazing movement will be devoted to the development of these needs, I believe. The technical expertise for these two areas will have to be developed together. The nutrient puzzle for perennials is more complex than the fertility needs for annuals like corn and soybeans. It appears that the overwintering abilities of the most productive grasses and legumes may be linked to soil fertility. Cool-season grasses and legumes each have different nutrient needs at differing times of the year and seem to respond to more frequent applications of some fertilizers and calcium. Availability of these nutrients seems to be more of a problem than most of us have experienced in our previous lives as corn, soybean and alfalfa producers. The distribution system in place is structured around conventional producers. In my area, the fertilizers available are anhydrous ammonia, urea, diammonium phosphate, and potash. Even the pricing methods are set up to encourage large, one-time applications of these products in either fall or spring. Alternative products like ammonium sulfate or gypsum have to be purchased in semi-load lots and/or spread with your own equipment.

Our on-farm research will have to be aimed at improving the amount of energy and protein that we produce per acre.