



## Brockett's Ag Advice

By John E. Brockett  
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For years I have been writing that the key to economical milk production is forage quality. For years top money managers among dairymen have been aiming at forages in their goal to produce milk at a cost that is less than the price received. Today I would like to take an excerpt from a ten-year study done at Wisconsin.

### RESULTS

**RESULT NO. ONE** - Milk per ton of forage:

- Low quality forage (under 56% TDN under 13% Crude Protein) 1340 lb. of milk per ton of hay-type forage.

- Average quality forage (58% TDN and 16% Crude Protein) 1735 lb of milk per ton of hay-type forage.

- High quality forage (over 62% TDN and over 19% Crude Protein) 2031 lb of milk per ton of hay-type forage.

**RESULT NO. TWO** - They found that it was not possible to feed

enough grain to fully compensate for the poor quality forage.

**RESULT NO. THREE** - Using the cost of maintaining a 1200-lb cow producing 16,000 lb of milk per year, the researchers found that an acre of low-quality forage actually lost \$200. They also found that an acre of average quality forage made nearly \$100 and an acre of high quality forage made over \$220.

### Raising Forage

Raising high quality forage starts with a sound fertility program. This means soil testing so nutrients are in balance and the pH is adequate. It means application of the right mix of nutrients at seeding time and as a top dress on established stands.

A second step is recognizing when hay forage crop fields need to be rejuvenated by tearing them up and going into another type of crop. Or when all that is required is a good maintenance lime and

rejuvenation.

A third step is the selection of the proper mixture of legume and grass for the soil, the area, and your needs (sale crop, beef, dairy). You may be able to sacrifice some yield in favor of more quality by the way you select the grass to go with your alfalfa. Or you may use trefoil in some of the northern counties in place or along with alfalfa.

### Producing Forage

A lot of farmers can raise high quality forage. Where many fall by the wayside is in following through on the producing end.

Early cutting does two things. It improves quality - no one disputes that. It also may increase the overall yield by providing you with one more cutting.

However, as you can see from the Wisconsin results above, quality is far more important than yield. There is no way the cow can eat through low quality forage to offset the milk production from higher quality forage.

If the cow did have an unlimited capacity for forage it would take a yield of 52% more per acre on low quality forage than on high quality forage. Example: It would take 4.5 tons of low quality hay per acre to equal 3 tons of high quality hay.

In fact we usually find that cows

will eat more of the high quality material than the lower quality material.

### Using Forage

Just as you use soil tests to determine the balance of nutrients for your crops, use forage tests to determine the balance of nutrients for your animals.

Forage testing does 2 things:

- It monitors the quality of your forage - an important step in the production of high quality forage.
- It saves on the feed bill by showing you how to balance nutrients - not over feed protein in relation to energy or visa versa.

## Assistant agent appointed in York

**YORK** - John E. Rowehl has been named assistant extension agent in York County, following an announcement by W. Wayne Hinsh, associate director and associate dean of Penn State's Cooperative Extension Service.

Rowehl will be responsible for developing and conducting educational programs in agronomy, potato farming, water quality and soil management. He will also develop agricultural and 4-H programs in agronomic crops and tractor safety.

One of Rowehl's major projects involves the Chesapeake Bay. We plan to study soil and water conservation techniques and how they apply to farm practices like manure management," he says

"Basically, we want to know how we can reduce's agriculture's share of the problem."

Rowehl earned his bachelor's degree in agronomy from Cornell University in 1982. Before attending Cornell, he obtained an associate degree from the State University of New York's Agricultural and Technical program.

Since March of 1984, Rowehl acted as assistant county supervisor for farm and rural credit with the U.S. Department of Agriculture in Lockport, N.Y. Earlier, he was self-employed as a vegetable crops production manager in Mattituck, N.Y. Rowehl has a New York State pesticide applicator's license

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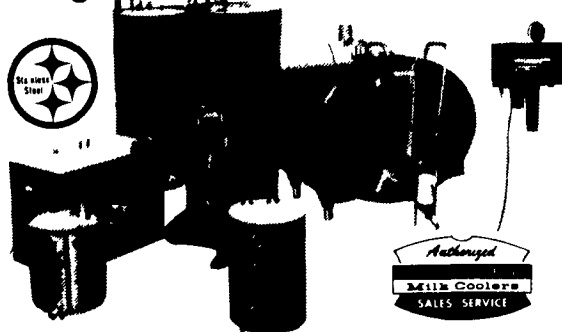
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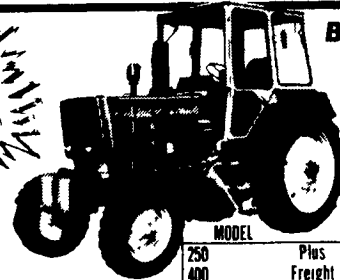
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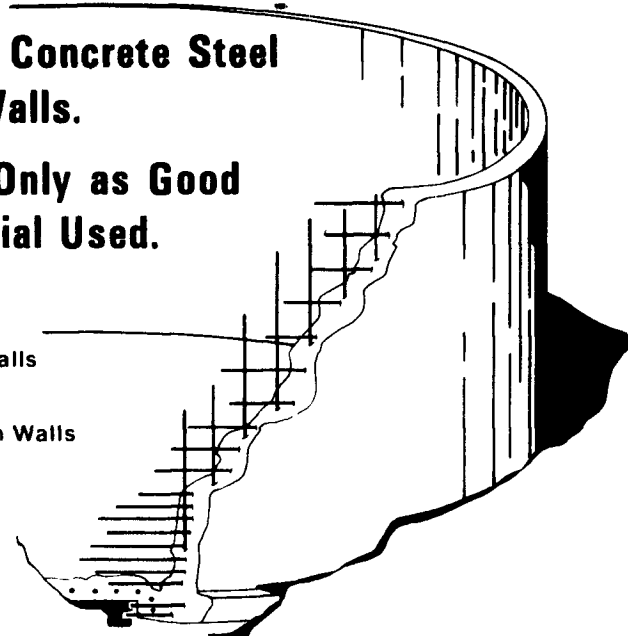
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