

# Conference Brings Together Farmers, Researchers, Industry

(Continued from Page 10)

"Once silage producers have a firm handle on the factors that they control, it is then and only then that silage additives should be considered," said Lutz. "It is at this point that good silage can be made better."

Currently four classes of additives are available: enzymes, non-protein nitrogen, acids, and bacterial inoculants.

"Bacterial inoculants account for approximately 70 percent of the silage additive business," said Lutz.

Although additives are largely unregulated in the United States, in Canada proof of efficacy must be shown before the products can be marketed to Canadian farmers.

Positive effects from using the additives have been shown in controlled university and industry studies. Some effects include lower pH, greater lactic acid content, lower contents of acetic and butyric acid, greater dry matter recovery, improved digestibility, and

improved bunklife when the ensiled material is exposed to air.

When deciding to use an additive, Lutz suggests farmers ask several questions first, such as what animal performance data exists in addition to simple fermentation data?

"Improvement of animal performance is the most important factor affecting economic return on investment," said Lutz.

Also of interest is if the products have registered claims in Canada and if so, what they are, and if the science of silage making is basic to the business of the marketing firm.

Hand in hand with producing quality forages is being able to make them stretch to feed all the animals for an extended period of time. With this in mind, Dr. Lisa Holden, of Penn State University, spoke about feed budgeting.

"What feed budgeting is looking at the shortages and the surpluses in the

forage growth so you can optimize the whole system," she said.

"Why should you budget pasture?" she asks.

According to Holden, most grazing farms in the Northeast experience both excesses and shortages of pasture in the same growing season. The shortages are handled by supplementing animals with stored feed and the surpluses by harvesting the excess.

By budgeting the forage, there is a more timely response to changes in pasture quality.

"Without a feed plan, often the decision to harvest paddocks or provide supplemental forage comes too late — after the forage quality or animal production has declined. The management decision is made as a reaction to declining performance rather than as a preventative measure to ensure optimal performance and profit," said Holden.

Farmers can start budgeting their forage just like they were budgeting their finances.

"You need to estimate your expenses for a given period of time. The expenses in this case are the number of animals in each production group being grazed," she explained.

Next the income, or amount of pasture cover plus the amount of growth expected must be recorded.

Supplemental feed that is included in the feeding program while the animals are grazed must also be recorded.

Estimates are available for the amount of growth that can be expected throughout the year and animal requirements and expected intakes can be obtained from your nutritionist.

Rough estimates of pasture value can be made using a yardstick: one inch equals 300 pounds of dry matter per acre.

"Feed budgeting with pasture can help you to tighten your management of both animals and pastures. Better decisions about moving animals and incorporating pasture into your overall feeding program are likely to improve income over feed costs," said Holden.

Also on the day's agenda were Dr. Marvin Hall of Penn State University, who related experiences from his recent trip to New Zealand and their grazing program; Kathy Soder, doctorate candidate, Penn State Dairy and Animal Sciences, who gave some key factors to look at when reading forage sample reports; and Dr. John Comerford of Penn State, who compared pasture types to extend the grazing season.

Although turnout to the conference was lower than last year, those who attended thought this was a day well-spent.

John Beaty of Binghamton, N.Y. agreed that the one-day seminar was a positive experience. "I wanted to keep up on the latest research regarding forage and how that fits into the feeding resources that we have. We always try to maximize our resources."

## Maximizing Alfalfa Yields — A Look Back

(Continued from Page 14)

The table included here summarizes production costs and net returns at various yield levels for the years 1981-1984 for those participating in the program.

Actual costs under today's economic conditions may differ. But it's a good bet that the relationships of yield, production costs (per acre and per ton), as well as net return per acre that we saw in the early '80s still apply today.

Finally in the late '70s, Dr. Robert Wagner, then president of the Potash and Phosphate Institute, said, "Moving up to maximum economic yields in the best way — and about the only way — farmers can control their profit

margins today. Research has given us good components or parts — high-yielding varieties, improved fertilizer practices, new pest control methods, better tillage and residue management practices, and many others.

"We can expect research to turn out still better individual components. But greater strides toward high yield will likely come through fitting these parts into combinations that produce positive interaction."

During an eight-year period, nearly 400 Pennsylvania alfalfa growers cooperated in a program to show us here they put these parts together to obtain maximum yields.

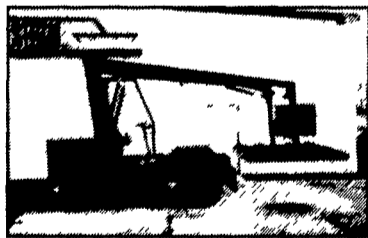
And I have a hunch that Dr. Wagner's observations are still true today.



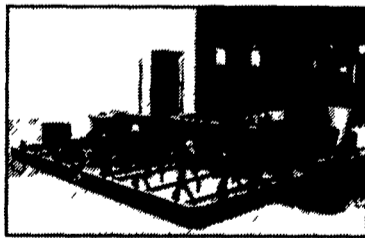
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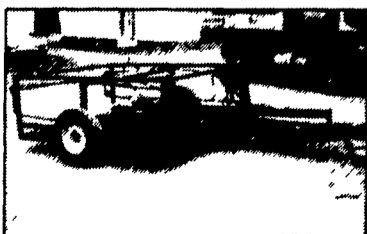
55- The "Model 55" bale rack is the foundation on which Steffen Systems Incorporated has built its reputation of quality. This model is available in many frame-size options, as well as with attachments to fit bucket loaders, forklifts and skidsteer loaders, to accommodate nearly any bale size or mounting application.



200- The "Model 200" self-propelled yard loader is a unique machine designed to move many bale sizes and package configurations at high speed. Its stacking height of 20 feet and short wheelbase allow the "Model 200" to maneuver in and out of tight areas while making optimum use of the existing storage space.



65- The "Model 65" bale rack is specifically designed to match the needs of New Holland bale wagon users, such as models 1003, 1037 & 1069. With six hook bars, this unit easily handles any three-bale-wide package. This model is also available with several frame-size options and mounts to suit your special needs.



950- The Bale "Accumulators" are designed to conveniently and easily arrange up to ten 2-tie or eight 3-tie bales into a uniform package. The fully automatic electric over hydraulic controls operate the accumulator without the need of an operator. With its quick and smooth functions the bale accumulator can accept up to five bales per minute.

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