## **Quality Forage Conference Offers Variety Of Information**

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"What you'll notice a lot of time is you'll see a crinkling of the leaves," said Craig.

Pest control can be difficult, according to Craig. Often the issue with insects in the lack of approved sprays.

"For example, there's nothing labeled for a variety of mites on orchard grass," said Craig. "There's a reaction to every action when dealing with these biological systems."

Some natural pest control measures are most effective.

"The good thing for aphids is ladybugs," said Craig.

In a transition from growing forages to harvesting them, Dr. Harold Harpster, of Penn State University combined actual research data with practical insights when evaluating chopped baleage.

'There are advantages to round bale silage," said Harpster. "First you only use hay equipment - no silo. Next you have a way to store surplus forage and third, you can save a field in poor weather."

The disadvantage to this system is that the dry matter intake is often reduced in comparison to dry hay and there is extra work required by the cows to pull the forage from the bale," he said.

In his research, Harpster evaluated two round bale processing systems and then offered the processed forage in two types of feeders and studied how access time influences the intake of the baleage.

"The concept from New Holland was to make a baler that cuts and processes the bale at time of harvest," said Harpster.

The system that they found worked the best was a bale slicer. In operation, the baler formed a solid core. Then, knives, placed at seven to eight- inch intervals, slice through the bale as it is rolled. As the bale reaches its desired weights, the knives retract once again and the final few layers of the bale are left intact, holding the bale together.

After baling, the wet bales were wrapped in plastic and fermented for 90 days. When the feeding trials began, they found that the average daily gain of the heifers in the trial was much higher with the sliced bale than the regular unprocessed bale or by a bale processed by a different method. They used both regular ring feeders and cone type feeders in their trials.

"With the ring feeders, there is much more waste, but it is easier to place the bale inside. The cone feeders virtually eliminate the waste, but it takes a lot more horsepower to get the bale lifted into the feeder," said Harpster.

Harpster also noted that this system makes it easier to incorporate baleage into a TMR and is an excellent way to harvest straw for bedding.

The system is not without limitations, however. The researchers found that running the equipment with the knives engaged required significantly more horsepower. They also discovered that delivering the bales to the feeders took some skill, as the processed bales fell apart very easily.

"We found that if we could lift the bale to the feeder and unwrap it above the feeder, we saved a lot of feed, however, we could see how not everyone could manage this," said Harpster.

Delivering a program on watering systems was Robert Declue of New York.

Declue has conducted water usage demonstrations with cattle on pasture, utilizing several different watering systems. Sid Bosworth was again on the speaking platform in the afternoon.

Gleaning information from his current research on developing practical methods of predicting forage quality with cool season grasses and grasslegume mixtures, Bosworth admitted that much of the time farmers don't really know the value of the feed.

"Most forage harvest decisions are made with little or no information on actual forage quality," he said. "The most common factors affecting harvest decisions are the calendar date and the stage of plant maturity.

There are problems with both of these approaches," he said. Bosworth defines forage quality as "the sum of all the plant constituents that influence how an animal performs." He also challenged the methods on which most forage tests are based.

"ADF is a good target for balancing rations," he said. "The problem is that from one year to the next, the relationship changes. As ADF increases, digestibility decreases. Digestible NDF is becoming a more popular method."

Other factors affecting forage quality include the forage crop species and variety, the part of the plant that is harvested and consumed, the harvest and storage factors, the climate and weather conditions and the soil fertility.

Bosworth has also incorporated the use of growing degree days when determining forage maturity levels.

"For alfalfa, we found it needed 700 to 750 growing degree days to reach a NDF of 40 percent," he said.

He recommends combining growing degree day information with a forage test to measure NDF two to three weeks before harvest time.

Approximately 50 farmers and agribusiness representatives attended the Quality Forage Conference in Mansfield.

## **N.Y. Dairy Grazing Conferences Attract 240**

## **Dan Demaine Cornell Extension**

January 13-18 was an exciting week for New York dairy graziers. A series of Dairy Grazing Conferences swept across the state, featuring two outstanding farmers as keynote speakers.

The conferences were made possible by funding provided by the Cornell Small Farms Program, the New York Pasture Association, and the New York Grazing Lands Conservation Initiative. They took place in six different locations so that nearly every New York farmer was within an hour and a half of one of the meetings.

The conferences featured two well-respected farmers as keynote speakers. David Surprenant from Illinois and Larry Shearer from Massachusetts were enthusiastically received by the audience for

willingness to share their own experiences.

At the Cortland meeting, Surprenant answered questions from farmers from the time he finished his presentation at 12:15 pm until we left shortly after 4 p.m. — without a break for lunch! That type of interest and enthusiasm for the speakers and their talks occurred at all of the meetings.

In addition to Surprenant and Shearer, each of the meetings included other presentations that were of specific interest to farmers in the local area. The presentations ranged from farmer panel dis-

their practical knowledge and cussions to presentations on pasture forage quality, renovation of pasture, and plant-herbivore interactions. The balance between presentations by farmers from outside New York and presentations pertaining to local conditions seemed to work well.

> In evaluations of the meetings, almost all participants said that having farmers as speakers was an important factor in their attending, and was one of the things they enjoyed most about the meetings. In total, over 240 people attended the six meetings, with the vast majority being farmers.

One participant ended their evaluation with a sentiment shared by many: "Thank you Dairy Grazing Conferences, for a thoughtful, informative, fun, and useful afternoon."

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For more information about many other small farm topics, visit the Small Farms Program web site at www.smallfarms.cornell.edu.







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