

Herdsman

(Continued from Page A19)

them; they are now researching them to seek better profit for the Pennsylvania dairyman.

Although specific recommendations will be a little time in coming, Hoover said some things dairyman are widely practicing which can be changes now are increasing stocking rate in pastures, starting cows on pasture sooner in the year, so that they don't get overrun with too tall and too mature plants of little value and interest from the cattle.

In the first experiment Hoover showed the group, a 38-acre area was seeded with 22 varieties of grasses, both forage and turf varieties.

Researcher Dwane Pysher, discussed the project.

Included were 10 varieties of perennial rye — five tetraploid and five diploid — four tall fescues, reed canary grass, orchard grass

The 9-foot, by 90-foot strips of sowed grasses were alternated and repeated four times over the acreage. That was done to increase the randomness of the experiment, which was to determine what cows preferred, and how well it held up, under the conditions of utilization and management indicated by other studies.

The grasses were planted in the fall of 1989. In May of 1990, the grazing began.

Forty-eight cows were pastured in paddocks which were fenced off to ensure that the cows had equal access to similar amounts of the various forages.

The acreage was also managed for spring and summer use. About two-thirds of the pasture was cut and used for haylage.

Prior to the cows being allowed in, the researchers sampled the plants to down within an inch of the ground to determine nutrient value.

Pysher said it is clear that the plants which were grazed grew back faster than those plants which were mechanically cut.

Also, the manure was left in the field. No dragging, as is suggested for parasite control.

The cows were allowed to enter the paddocks from the top of the hill. In all cases, the cows started grazing straight through, from top to bottom. When they got to the bottom, Hoover said they "remembered the better tasting stuff," and returned to it.

In this case, they devoured the orchard grass and used the rye for a bathroom, Pysher said. According to Pysher, 92 percent of the orchard grass offered was eaten.

However, the cows did eat the rye later in the year and the tetraploid rye had the highest nutrient value. But Pysher said that all species were of high quality. They tested out above 20 percent protein, up to around 25 percent protein.

The fescues, which Hoover said are considered "a no-no" for a pasture lived up to their reputation, in that only 65 percent of the tall fescue was used by the cows — except for Barcell tall fescue, of which the cows ate 88 percent.

The dry matter content of the forages are very important. Therefore PSU is looking at the preference of the cow, the amount utilized, the quality of the forage and the amount of dry matter (DM) produced by a forage. Included were aspects also, such as digestibility, protein content and percent fiber.

The study was mostly conducted last year, when the region

received its expected 27 inches of rain from May to Oct. 16. This year, however, the pastures are at a growth standstill. Hoover said that with the rain deficit as great as it is, Pennsylvania may not see 27 inches of rain during the entire year.

"From my standpoint, it's fortunate," Pysher said. "I can look at how the forages react under stress."

For a farmer's immediate applicability to modifying a pasture for use, Pysher suggested planting a well-rounded variety of forages and going with a program using the plant varieties that offer the most benefits.

The answers Penn State are seeking will provide farmers with the ability to better utilize stocking rate on paddocks, how long an area should be grazed, and which species of plant should be nurtured.

"We feel, based on preliminary information, we will be able to turn a 20,000 pound (of milk producing herd) and maintain that 20,000 pounds," Hoover said.

(Turn to Page A26)



Dwane Pysher explains his pasture studies dealing with a variety of pasture grasses, both forage and turf varieties.



This group of people, along on an Ag Progress Days dairy forage tour, examine a portion of pasture and examine the plants being tested under actual grazing conditions.

AG PROGRESS SPECIALS

NOW THRU AUG. 5% to 20% Discount

N-TECH Manure Systems

Zimmerman Steel Barn Equipment

CALL LAPP'S BARN EQUIPMENT FOR ALL YOUR BARN EQUIPMENT NEEDS

ACME Ventilation Systems

Ritchie Waterers

OSWALT by J-STAR

CAP Full Line Of Mixers

WEAVERLINE Feed Carts

Dynavent

FULL LINE J-STAR BARN EQUIPMENT

- Barn Cleaners & Feeders
- Manure Pumps
- Silo Unloaders - Conveyors

ZIMMERMAN MFG. CORP.

LANCASTER Level-Flo

J-STAR Scale Systems

YOU WON'T BEAT OUR PRICES & SERVICE

LAPP'S BARN EQUIPMENT

5935 OLD PHILADELPHIA PIKE, GAP, PA 17527

PHONE: 717-442-8134

— Radio Dispatched Trucks —