

Herd health, milking equipment highlight York Dairy Day

BY JOYCE BUPP
Staff Correspondent

YORK — Zero temperatures, frozen pipes and balky equipment helped thin normal ranks of attendance at York County's Dairy Day, January 23, but those taking part herd management tips on herd health, milking machinery and a panel of high-production-herd dairymen.

About a dozen related ag-business firms were also on hand for the annual dairy session, setting up exhibits for the day-long event at the county 4-H Center.

Herd health programs must be evaluated for their effect on total herd production, or the economic return, according to Dr. Les Griel, Penn State professor and veterinarian for the University's dairy herds.

Such programs need to look at infectious diseases, reproduction,

metabolic and mastitic disorders, plus calf diseases and parasite controls. In addition, a herd health program, Dr. Griel emphasizes, must include employee management, and the involvement and understanding of farm employees as to how - and why - certain health practices are to be handled.

Herd health programs need not be all that expensive, he explains, in comparison to other fixed costs per cow per year.

Studies cited by the veterinarian show an average cost of \$26 per cow per year in a herd with a 15,000 pound herd average, or about 1.3 percent of total yearly per-cow cost. That compares to a feed cost of \$585, or 29 percent, and building and equipment costs of \$354, or nearly 18 percent.

But nearly 20 percent of a yearly cost per cow, about \$385, is for

replacement of the animal. If additional herd health costs can prolong a cow's production life, and eliminate excessive culling, the higher vet bills perhaps needed to maintain cow health are still probably less than cow replacement costs.

Computers are expected to play increasingly larger service in maintaining herd health records, especially in the areas of reproductive health, predicts the PSU vet.

"Summarization of health records is where we need computer help," says Griel. "Otherwise it can be pretty difficult to keep track of details. Computers used on a weekly basis can help alert to open cows, cows to watch for heats and can generate management reports."

Dr. Steve Spencer, PSU's dairy extension specialist on milking equipment, recently spent a five-month sabbatical leave in Ireland, studying European milking systems.

Irish herds, he says, have all cows freshen in January and February, milk through fall and then stand dry for the last two months of the year, when the standby forage, grass, is least available.

A special interest of Spencer's was researching the part that slippage of the rubber inflations, or teat cup lines, contribute to mastitis problems.

Thirty-two different lines were tested during Spencer's working stay at an Irish dairy research facility, plus a couple of U.S. brands that he had shipped there for his own comparison.

European liners tend to be wider, and composed of a much harder rubber than the U.S. brands. While there seems to be less slippage during the milking process, those liners are hard on the cow; and brand new inflations are not generally used there on first calf heifers. A liner is put into the machine at the beginning of the milking year, and generally used



Dr. Steve Spencer, right, shows European-style milker liners, or inflations, to Wayne Beshore.

throughout that season of milking.

Spencer does suggest that domestic liners may have gone too far to the narrow bore, ultra-soft other extreme, and the very soft rubber of a liner can allow it to slip more under the pulsating pressure of milking vacuum systems.

Inflation mouthpieces are also different in the European design, generally much larger.

When air leaks into a milker from a slipper liner, it can alter the pressure on the other quarters, in either the opposite or diagonal direction, creating mastitis in

those quarters. He estimates that 70 percent of liner slippage can't be heard, but a "squawking" milker is a signal of a major slippage problem.

Through the testing of the various liners, the researchers found that there were some individual cows on which all liners slipped. While neither Spencer nor his Irish counterparts had time to further pursue that problem, the Penn State professor speculates that it might have a relationship to the thickness of skin on certain cows' teats.

Chester plans crop meeting

WEST CHESTER — An informational and organizational meeting for a Chester County Crop Management Association will be held on Thursday, February 7, 1985 at 7:30 p.m. The meeting will be held in the social hall of the Octorara Presbyterian Church, located on Route 10, one mile south of the intersection of Routes 10 and 30.

The evening's guest speaker will be Murry McJunkin, a farmer from Centre County. Murry was a charter member of the Centre County Crop Improvement

Association, the first association of its type in Pennsylvania. He has found the service of the association to be extremely beneficial in managing his crop production. He will discuss the advantages and problems associated with a crop management association.

Mel Brown, coordinator for Pennsylvania Crop Improvement Associations, will also be present to answer questions about the organization and function of a County Crop Management Association.



Penn State dairy herd veterinarian and professor, Dr. Les Griel says spending a little more on herd health can result in considerable savings if it promotes cow longevity and cuts culling and replacement costs.

York dairymen reveal management practices in farmer panel

BY JOYCE BUPP
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YORK — Three of York County's top production dairy farmers laid their management practices on the line for discussion as part of the York dairy day seminar, on January 23.

Taking part in the panel presentation and question-answer session were Jed Beshore of Beshore Farms, New Cumberland, Doug Cope, manager of Ashcombe Dover Dairy, Dover, and Tom Boyer, Sunnybend Farms, York.

Beshore's 46 head of registered Holsteins average 19,700 milk and 704 fat. With the low somatic cell count of 189,000, Beshore spoke to the topic of care of milking equipment and cow treatment.

He related how a round of mastitic problems in the past led to a trouble-shooting session with University specialists. A system checkup culminated in the discovery of improperly working vacuum regulators. Beshore has also instituted a change to new inflations every 900 milkings, plus regular replacement of other rubber milker machine parts. A switch of hoses is also made every other time inflations are replaced.

Cow preparation includes individual paper towels for wash and dry, strict adherence to teat dipping, and dry treating only quarters that have exhibited problems during the lactation. When mastitis does flare up, Beshore draws and refrigerates a pre-treatment sample of the affected quarter, to be used for later cultures if standard treatments bring no response.

With a current herd of 165 head, normally 250 head before the milk diversion program, the Ashcombe Dover Dairy maintains the herd average of 18,600 and 680 fat. Reproductive management was the focus of Cope's presentation, and his herd health program includes regular vaccinations, monthly herd checks, plus mid-month rechecks for problem individuals.

Cows in the Ashcombe dry lot must walk a distance every day for water, and Cope credits this regular exercise program to the herd's records of little problem with overconditioning, or "fat cow" syndrome.

Regular reproductive checks, he adds, force a study of cow records and bring problems to light. He carries with him at all times a list of cows to be watched closely, and farm employees are alerted each day of which cows to observe.

And, when the vet is doing herd checks, Cope believes a dairyman should "press" and ask questions to get as much information about her condition as is possible.

At dryoff and a few weeks prior to calving, cows get selenium boosters. If a fresh cow has not cleaned in twenty-four hours, she'll get a systemic antibiotic. Sacrificing a few milkings, Cope figures, is far better than losing a whole lactation due to prolonged cleaning problems.

A warning from Penn State vet Dr. Les Griel, however, was that selenium-Vitamin E supplements don't usually benefit herds unless a 30 to 40 percent rate of retained placenta problem is occurring. He

labeled selenium a "very toxic material, possibly carcinogenic," but added that shortages of the mineral-vitamin mix do seem to affect the cow's immune system and can cause certain vaccines to be of little or no value.

With an almost zero calf loss rate in their several years of dairying, the Tom Boyer family's calf raising program was the third panel topic.

Boyer's herd of 45 registered Holsteins has a 20,000 milk and 760 fat average. In heifer-measuring programs conducted over several months by extension personnel across Pennsylvania, the Boyers topped the state in heifer growth. Boyer, however, is quick to credit his daughters, Bridgette and Jenelle for heifer care, since they are in charge of the calves until several months of age.

Cows are freshened either in

bedded boxstalls, or preferably outside in suitable weather. Navels are dipped in iodine and colostrum fed within the hour, and the calves left with the dams for the first few days.

Housed in outside hutches, calves receive top grade milk replacer and 18 percent free choice calf starter. No hay is given until calves are a month old, and then they get only a timothy, or second-cut, fine-stemmed alfalfa.

Bottle feedings continue to about two months, and after six weeks starter grain is replaced with a slightly lower protein grower mix, until three months old. Then calves go from hutches to groupings of up to six, and are vaccinated and have any extra teats removed. Regular worming programs are included for all animals.

Between each calf housed in a hutch, the open-ended pens are

turned over for sunlight exposure a few days, and moved slightly from the previous position.

At six months, heifers go on heifer rations and rougher hay, and a little silage is added to the diet. Bred heifers are put out on pasture, with timothy, grass and alfalfa hay, plus limited quantities of silage. Target for freshening heifers is at one year, eleven months or a maximum of two years old.

Boyer added that he has little problem with cows freshening during the night, after following a tip he heard many years ago at a dairy meeting. That speaker suggested that cows dried off after morning milking will not usually freshen during the night-time hours. Boyer decided to test the theory for himself, and rarely has to get up during the night for calving assistance.



Jed Beshore



Doug Cope



Tom Boyer