

# Pinkeye vaccinations become springtime ritual

LANCASTER — Like other Pennsylvania dairymen, Charles Hess is anxious to get his heifers out on pasture this spring.

But before he mends one fence or even thinks about opening the barn door, he'll call his veterinarian and ask a very basic question: "Dr. Graybill, what about those pinkeye shots?"

Vaccinating his young stock against pinkeye has become a springtime ritual for Hess, who remembers all too well what an outbreak of the disease did to his heifers a few summers ago.

"The pinkeye was so bad in the summer of 1983, we didn't even mark down all the cases," he says. Nearly one third of his 50 replacement heifers contracted the disease that year, costing him untold hours of extra labor, not to mention the dollars spent on treatment costs.

"Nearly every day that summer," he remembers, "I was spending an hour or so every morning rounding up the heifers in the meadow so we could treat them. We used the eye drops and gave some of them shots, but sometimes we didn't catch them in time."

Hess and his veterinarian, Dr. Robert Graybill, of Lancaster, did their best to control the disease, but some of the young stock were left with scarring on their eyes, and one cow in the herd even went blind. The last straw for Hess was when one of eight heifers to be

exported by the Pennsylvania Holstein Association was rejected because she had a spot on her eye.

"I told my veterinarian that when that pinkeye vaccine becomes available, we want it," says Hess.

In the spring of 1984, the Pequea dairy farmer got his wish. Dr. Graybill injected about 30 heifers from six months to two years of age with the Piliguard Pinkeye vaccine. One shot in early April and a follow-up dose about four weeks later protected the young stock through the year. Not one case of pinkeye surfaced in the herd, even during the hot days of August when the disease usually reaches its peak.

In 1985 only the youngest heifers needed two protective shots. Older animals that had received the vaccine the previous year needed only one shot to maintain their immunity to the disease. Again, pinkeye was absent from the herd throughout the summer.

"It's really surprising how well the vaccine covered for them," remarks Graybill about Hess' success with the vaccine. "Once you get pinkeye on the farm, it's almost unstoppable."

Pinkeye is caused by the *Moraxella bovis* bacteria, which adheres to the surface of the eye and causes infection. Once one heifer in a pasture contracts the disease, others are likely to follow because face flies carry the *M. bovis* organism from one animal to

another.

Pinkeye peaks in mid- to late summer, when heifers and cows on pasture are most susceptible to infection. During the hot, dry days of August, the bright sun and airborne dirt and pollen irritate the animals' eyes, predisposing them to invasion by the bacteria.

"Pinkeye starts with squinting and tearing," says Dr. Larry Hutchinson, Penn State extension veterinarian. "Then the next step is a reddening or inflammation around the cornea. When the eye gets whitish and opaque instead of clear, the animal's vision is severely affected."

The disease progresses rapidly through these steps in just a matter of days, adds Graybill. "In a lot of dairy operations, the heifers are out in the back pasture and aren't routinely observed. If pinkeye gets a start, and the heifers aren't looked at every day, one small case can really be advanced by the next day."

Left untreated, an infected cornea may rupture, resulting in blindness. Hutchinson notes that the animal may then have to be culled out of the herd at a considerable economic loss.

Even if replacement heifers don't actually go blind from the disease, the associated costs do mount up. Charles Hess figures his greatest loss to pinkeye was the hours it took to round up and treat the sick heifers. Other measurable losses include the decreased

growth rate of infected animals and the expense of treatment.

"I'd estimate the treatment cost at \$10 per head, plus the farmer's labor. And then you can add on \$15 if I have to be called in to treat severe cases," says Graybill. "And you know that's an extremely busy time of year for the farmer, so having to take time out of the day to treat pinkeye is a real hardship for him."

Hutchinson emphasizes pinkeye's effect on growth. "A heifer can easily lose 50 pounds or more if she can't get around and doesn't eat or drink over a couple of days," he notes. "If young stock are pastured and if the farmer has had problems with pinkeye in the past, I recommend that he strongly consider using a vaccine in the spring."

Lancaster County extension agent Glenn Shirk agrees. "It's hard to quantify the losses caused by pinkeye, but my gut feeling is that vaccinating would probably pay back some dividends. In these times of tight economics, farmers

can't afford to let pinkeye go unchecked in their herds."

Dr. Hutchinson also points out that pinkeye treatments, such as the ointments, drops, patches and others, may help cure existing infections, but aren't entirely satisfactory because they're all "after the fact," besides being very labor intensive.

Piliguard Pinkeye is highly effective against the *M. bovis* bacteria because it is a pillated vaccine, notes Dr. Harlan Bigbee of Schering Animal Health. Pili are long, thin, rod-shaped proteins that extend from the bacterial surfaces and attach to the eye tissue. The vaccine, Bigbee explains, contains pili antigens that stop attachment and thereby prevent disease.

In addition to vaccinating in the spring, cautious farmers can take extra measures to relieve some of the summer stresses on pasture cattle, suggest the extension personnel. Keeping pastures trimmed, providing shade for the cattle, and controlling flies will help keep livestock healthy.

## Livestock auctions to discontinue handling certified calves

Livestock auctions represented at a Pennsylvania Livestock Auction Association meeting April 23 voted unanimously to discontinue handling certified calves beginning May 10, 1986.

The association believes the effort to reduce sulfa residue needs a new direction at this time and has pledged to cooperate with all interested parties — producers, packers and government officials — to work toward eliminating these residues.

"Because the marketing sector's livelihood depends on the free and uninterrupted movement of livestock, our members are extremely concerned about this problem, association president Jim DeGaetano said.

"That is why our members agreed to take part in the voluntary certification program, despite the paperwork burden it imposed on them.

"But," he pointed out, "the voluntary system was based on two important elements: that it would educate producers about the residue problem, and provide a way for the regulatory officials to find those producers who repeatedly violate animal drug usage laws.

"However, after over a year, the educational value of requiring producers to sign certification statements had diminished and since there have been so few cases prosecuted for misuse of drugs that it does not justify auctions continuing to put up with a paperwork nightmare," DeGaetano said.

"While we are discontinuing our participation in the voluntary program for these reasons, I want to stress the interest and concern of the Pennsylvania Livestock Auction Association in finding a solution to this problem, but it serves no one to continue a program that is failing to accomplish its initial objectives," he said.

Those auctions who voted to discontinue handling certified calves effective May 10 are: Belleville Livestock Market, Inc.; Carlisle Livestock Market, Inc.; Chambersburg Livestock Sales,

Inc.; Chesley Sales, Inc.; Cowanesque Valley Livestock Market; Dewart Livestock Market; Green Dragon Livestock Sales; Greencastle Livestock Market, Inc.; Keister's Middleburg Auctions Sales, Inc.; Lancaster Stockyards, Inc.; Lebanon Valley Livestock Market, Inc.; Meadville Livestock Auction; Mercer Livestock Auction; New Wilmington Livestock Auction, Inc.; Penns Valley Livestock Auction; Perkiomenville Auction House, Inc.; Quakertown Livestock Sales, Inc.; Valley Stockyards, Inc.; and Vintage Sales Stables, Inc.


## USDA to survey crop acreage, livestock numbers

HARRISBURG — The Pennsylvania Crop and Livestock Reporting Service announced today that Pennsylvania crop and livestock producers will be asked to participate in a nationwide survey during late May and early June. Information obtained in this survey will be used to develop estimates of 1986 crop acreages and mid-year livestock numbers. All individual information is confidential and used only in developing official national states estimates.

State statistician Wallace C. Evans noted that concerns about cost of production and returns from farming continue to weigh heavily on producer plans this


year. Production and market uncertainties highlight the need for acreage and livestock information producers can rely upon, according to Evans. Farmer cooperation on the survey is the key to developing accurate estimates, he added.

Representatives from the Pennsylvania Crop and Livestock Service staff will interview a cross section of farmers, and questionnaires will be mailed to others to gather data for these estimates. National and some Pennsylvania estimates will be published by USDA's Crop Reporting Board. A report on 1986 crop acreages will be available on July 11, including estimates of yield and production for several major crops. Estimates of hog and pig numbers will be released on June 23, and cattle numbers on July 25.



## Beef Briefs

by  
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## Being Average Is Not Enough

In 1984 the sale of cattle and calves accounted for 10.4 percent of Pennsylvania's Agriculture income. This was exceeded only by milk and all poultry. The problem is that for many producers there

were no profits. This is true of many ag commodities. Probably only the top 25 to 35 percent of the producers made money if Pennsylvania producers are similar to those in an Iowa farm records study.

### RETURN PER CWT. OF CATTLE SOLD FOR LOW 1/2 AND HIGH 1/2 OF OPERATORS IN NORTHWEST IOWA FEEDLOT RECORDS PROGRAM

Year	Low 1/2 of operators Net return/cwt. sold	High 1/2 of operators Net return/cwt. sold
1977	\$-1.16	\$ 2.94
1978	4.08	10.39
1979	-0.31	8.74
1980	-9.79	-3.15
1981	-9.57	-2.06
1982	-4.78	4.80
1983	-8.09	0.58
1984	-5.96	5.76
<b>Average</b>	<b>-4.45</b>	<b>+3.50</b>

The data in the above Table shows that the low return operators lost money seven of the eight years reported while the top third of the operators made money in six of the eight years. Looking at the figures another way, if the average steer sold weighed 1,150 pounds the low-return operators lost an average of \$51.17 per head while the high return feeders made an average return of \$40.25 per head. Just what separates the low return from the high return feeders?

Closer examination of data shows that high return operators put on gain for less money with less feed required per pound of gain, have faster rates of gain, less death loss and, as a major factor, have greater purchase-sale price margins. It really breaks down to reveal that profitable feeders were better businessmen and paid more attention to the details of management.

Maybe before you decide to feed that next group of cattle you need to evaluate your management

abilities. Do you have a history of being a profitable feeder, an average feeder, or usually show a loss. Next, decide if you can improve management or if it isn't worth the effort. Nobody is going to guarantee you a profit, you have to work for it.

A check list to consider would include but not necessarily be limited to:

1. Do you budget out the prospects for profit before each group of cattle?
2. Do you know what your cost are with current price conditions?
3. Do you have other alternatives for your feed resources?
4. Can you stand a major loss if the market moves against you?
5. Do you use available technology and know if it is cost effective under your situation?

Most will not be able to answer all these questions to their satisfaction, but if I can stimulate you to try to evaluate your situation, this column will have been worth the effort.

