

## Penn State Cooperative Extension Capitol Region Dairy Team

### ABORTIONS IN DAIRY COWS, HEIFERS Dr. Arlen Mills Extension Veterinarian Capitol Region

In spite of many advancements in dairy management and practices, pregnancy loss continues to be a problem. Studies have shown that an abortion costs an average of \$600.

Some may only count those abortions where there is obvious expulsion of fetal tissue. Others may include those early pregnancy losses that may occur before day 45 of gestation. These cows miss a heat after breeding only to come back in heat again at 45-60 days. The better your records and heat observation, the better your detection of a problem will be.

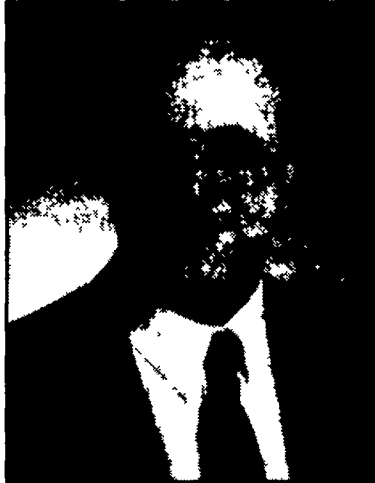
Monitoring abortion occurrences is critical to your herd. Abortions can have many causes, and early detection of abortions may enable you to catch the problem that much sooner. Diagnostic labs get a diagnosis only 25 to 40 percent of the time when an aborted fetus is submitted. The lab may be most successful in coming to a diagnosis if an infectious disease causes the abortion.

Therefore, no diagnosis may indicate that the cause is not related to an infectious disease. Because toxic, metabolic, and hereditary causes of abortion don't usually cause changes in the fetal tissue, diagnosis is most difficult in these cases.

At what level of fetal loss is it time to become concerned? Literature seems to indicate that on an annual basis, 8 percent to 16 percent of pregnant cows will lose their pregnancy. Any changes on a monthly basis may also be meaningful. It's interesting to note that most herds going through expansion see an increase in pregnancy loss.

If a herd has a real abortion problem, the next step in solving this is to determine a cause. Everything that can affect the cow may be a possible cause. Let's consider some possible causes of abortion.

Infectious diseases may be ruled in or out on the basis of when fetal losses are occurring, examination of aborted tissues, and blood work. Diseases to consider include BVD, IBR, leptospi-



Dr. Arlen Mills

rosis, Salmonella, and neosporosis. Solving the problem may involve management changes and revision of vaccination practices. Often these agents are brought into a herd through lack of basic biosecurity practices. Avoid buying problems by pre-purchase testing and isolating purchased stock.

There are other inflammatory diseases that have definite effects on reproduction and abortion levels. Much has been written concerning the relationship of mastitis and fetal loss. It has been shown that cows that had clinical mastitis during the first 45 days of gestation were almost three times as likely to abort within the next three months as were cows without mastitis.

Severely lame cows also have a higher rate of pregnancy loss than herd mates. Lameness is a big factor in keeping cows from getting bred in the first place but also increases the abortion risk.

Nutrition should always be looked at closely when considering an abortion problem. Mycotoxins and elevated nitrate levels can certainly lead to abortions. Acidosis is an immune suppressor that may be involved indirectly. With the way we feed cows it would be very rare to see nutrient deficiency related abortions.

Abortions are costly and measures should be taken to minimize their occurrence. Proper feeding practices, biosecurity and sanitation practices, and adequate vaccination programs will help to reduce the incidence of abortion.

## Lebanon County Holstein Field Night Set For Brandt-View

CAMPBELLTOWN (Lebanon Co.) — This year's Lebanon County Holstein Field Night will be hosted by Brandt-View Farms on Friday, July 19.

The farm is a partnership between David, Karl, and Daniel Brandt and consists of 102 registered Holsteins with a rolling herd average of 31,661 pounds of milk, 1,201 fat, and 943 protein. They recently remodeled the milking facilities, adding loop stalls and thicker mattresses. They have also constructed a bull barn and dry cow facility on their operation in the last five years.

Brandt-View Farms has a growing embryo transfer program and has sent about 25 bulls to A.I. studs in the last five years.

Once again this year, there will be a buffet style meal from 6:30 to 8:30 p.m. Three classes of animals will be judged from 6:30 to 8 p.m. Tom Harkenrider, head of sire procurement at Genex, will be the judge and featured speaker for the evening. Come and enjoy an evening of door prizes, food and fellowship.

Brandt-View Farms is located on Rt. 322, 1½ miles east of Campbelltown and four miles west of Rt. 934.

# State's Dairy Industry In Danger Of Lagging Behind

UNIVERSITY PARK (Centre Co.) — Pennsylvania's dairy industry is at a crossroads. According to a Penn State College of Agricultural Sciences expert, the state's farmers must increase average production per cow and boost average herd size to keep national market share.

The state ranks fourth in domestic milk production behind California, Wisconsin, and New York, ahead of Minnesota and Idaho. Judging by 50-year trends that have seen states such as California and Idaho make sharp relative gains in production, it seems clear that Pennsylvania dairy producers must get bigger and better to compete and avoid constant erosion of farm income.

"Unless Pennsylvania changes the fundamental structure of its dairy businesses, the national trend towards higher production in larger herds will diminish the state's dairy importance," said Bill Heald, professor of dairy science. "Pennsylvania needs all of its dairy herds to increase production to grow its national market share. If not, Pennsylvania risks losing its dairy infrastructure — suppliers and processors."

Over the last 50 years, U.S. milk production has increased by nearly 51 billion pounds nationally — that equates to 62,000 more cows each year. Production promises to expand in the future to meet the nation's growing demand.

"The question is," said Heald, "will Pennsylvania share in this opportunity to grow, or will it stay neutral or lose more market share, as has been the case for the midwestern and eastern dairy states?"

The top five dairy states produced just 37 percent of the nation's milk in 1951. Today, six states — California, Wisconsin, New York, Pennsylvania, Minnesota, and Idaho — produce about 60 percent of the nation's milk.

## Farmers Union Seeks Restrictions On MPC Imports

WASHINGTON, D.C. — National Farmers Union (NFU) is pushing for passage of H.R. 1786, which would impose tariff rate quotas on imported milk protein concentrate (MPC) from other countries.

"Dairy producers are extremely concerned about the impact of imported MPC, casein and other milk derivatives that are displacing the domestic milk market and depressing milk prices," said NFU President Dave Frederickson. "Foreign exporters are circumventing trade regulations that have resulted in a surge of MPC imports and have rapidly increased imports of other dairy derivatives into the United States."

In a recent letter to Rep. Philip Crane, R-Ill., who chairs the House Ways and Means Trade Subcommittee, Farmers Union urged his consideration of H.R. 1786. Frederickson said H.R. 1786 would regulate MPC and casein imports in the same manner as all other dairy products. Specifically, it requires the U.S. Customs Service to establish new tariff rate quotas on non-industrial uses of milk protein concentrates and casein.

However, changes in top dairy states have occurred. "Idaho was a nontraditional dairy state just 10 years ago, and now it ranks sixth nationally," said Heald. "California went from fourth nationally to number one (producing more milk than Pennsylvania, New York, and Minnesota combined). The other top dairy states have faltered. Minnesota peaked in percentage of national milk produced in the '60s, New York in the '70s, Wisconsin in the '80s, and Pennsylvania more recently.

"Many of the top 20 dairy states are losing their dairy industry while the national need for milk continues to grow," said Heald. "The industry is consolidating into fewer dairy states and fewer dairy herds. Pennsylvania needs to keep up with these trends."

Milk production per cow has been a strong indicator of whether a state will grow or fade on the national scene. States in the top six that fell below the national average for milk production per cow also lost in percentage of national market share of milk in about the same decade. By contrast, states that were above the national average per cow grew dramatically, including nontraditional dairy states.

California grew from five percent of the national milk production in 1951 to 20 percent in 2001, and Idaho grew from under two percent to about five percent in just the last decade.

"Pennsylvania grew slowly in percentage of national market share of milk until recently," Heald said. "Our state has dropped below the national average production per cow, and now its percentage of national market share of milk has started to fall."

Production has continued to grow in western states such as Washington, California, Arizona, Idaho and New Mexico. All of

these states have above-average milk production per cow and herd size.

"Pennsylvania was below the national average production per cow and is down 0.5 percent in total production," said Heald. "Pennsylvania was only slightly below the national average in 2001. Strong increases in milk production per cow for 2002 are needed to reverse this trend."

Change in average herd size also can indicate where a dairy state is heading. About 60 percent of the nation's milk is produced in herds larger than 200 cows. Nationally, herds of all sizes have declined in the last decade — except those 200 or more. The herds capturing the greatest increase in national market share of milk were herds greater than 200 cows (predominantly in the 2,000-cow and larger herd sizes), while those with the greatest decline were herds with 50 to 99 cows.

"Only 17 percent of Pennsylvania milk is produced in herds greater than 200 cows," said Heald. "That's well below the national average, but changed quickly from eight percent to 17 percent in the last decade. Like the national trends, only Pennsylvania's herds with greater than 200 cows are increasing market share of milk. All other herd sizes are declining."

Gains in percentage of market share of milk with herds greater than 200 cows is not simply due to more cows, and is likely caused by a variety of factors. "Large herds tend to have higher production per cow, receive higher income, pay less for inputs and services, have better-quality feeds, and attract the best employees and service providers," Heald said.

However, there are successful and profitable herds with fewer than 200 cows, points out Heald. "Anyone working with the Pennsylvania dairy industry knows of highly profitable herds in each size classification. However, large, high-producing herds do enjoy favored business status and are becoming the norm. To stay competitive, owners of herds with less than 200 cows need to develop strong business strategies that help them to compete successfully."

## Dauphin County Holstein Club To Meet

ELIZABETHTOWN (Lancaster Co.) — The Dauphin County Holstein Club will conduct a twilight meeting July 18 at 7 p.m. at the Mahlon Lehman Farm, Elizabethtown. This is a change from the first date advertised as July 19. There will be a warm meal served from 7 to 8 p.m., provided by Cargill Feeds.

Allen Hostetter will talk about his family's farming operation and the type of cows they are trying to breed. He will also be official judge for the judging contest. Directions to the Lehman Farm: From 283, take the Tollhouse Rd. exit, go to Rt. 230, turn left, and go two miles to Deodate Rd. Turn left at the first crossroad, then right on Beagle Rd. and go to the first farm on the right. All dairymen and families are invited.