

## Penn State Cooperative Extension Capitol Region Dairy Team

### ABORTION IN DAIRY COWS AND HEIFERS

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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



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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, Leptospirosis, 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.

share available, out-of-pocket costs can be minimal. Most BMPs pay for themselves and the positive image is a bonus which supports our long-term compatibility with our rural community.

It is difficult to commit resources to these efforts during a challenging economic time. Perhaps 2003 isn't the year, but I believe, long-term, many producers will need to bring some capital to this area, or we, the ag community, may lose in the public opinion polls.

Environmental stewardship will be a significant part of the strategic plan for the successful producer in years to come. Start now, one BMP at a time. Get help from the experts in your area. As you do, you will see the benefits and your neighbors will, too.

In addition to moving up our environmental commitment, we also need to look at general farm appearance. I'm not suggesting freshly painted buildings and blacktop driveways. I'm talking about general roadside appearance. Old farm machinery and equipment should be moved to the steel recycler, weeds around the buildings should be sprayed or mowed, and clutter within the sight of the public kept to a minimum.

The saying, "a picture is worth a thousand words" can be said for the visual effect of your farm. Are your thousand words positive? Every community has farms that portray a very positive roadside farm image. Your farm can become one. Start today one step at a time.

# "Basically" Farming



Helpful hints for new  
and existing farmers

PENNSTATE



College of Agricultural Sciences  
Cooperative Extension - Southeast Region

## MAKING SENSE OF YOUR MILK CHECK

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Understanding your milk check can be a mind-boggling task. Numbers and abbreviations can blend together, making it look more like a detailed tax document rather than a payment check.

What do the numbers mean? Where did they come from? What parts are under your control?

This article will give a brief explanation of the various parts of your overall milk check.

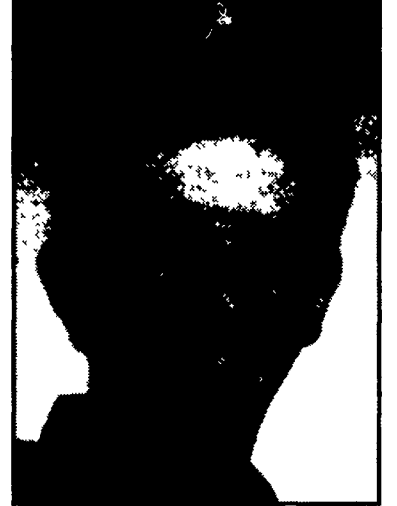
To comprehend the different parts of your check, it's best to get a little background information on the milk pricing system. If you ship milk in Southeastern Pennsylvania, eastern Maryland, Delaware, eastern New York, or the New England states (excluding Maine), you are in the Federal Milk Marketing Order #1. If you ship milk in western Pennsylvania, Ohio, and parts west, you are in Federal Milk Marketing Order #33. This information will have significant bearing on determining the numbers you see on your milk check.

The first number you should locate on your check is the number of pounds of milk shipped for this pay period. This number may show up as Grade A Pounds, or be stated in some other form. From there, the total pounds shipped are broken down into pounds of butterfat shipped, pounds of protein shipped, and pounds of other solids shipped (minerals, lactose). Obviously, if you add these numbers together, they will not equal your total pounds shipped. The rest of the "material" shipped is water. This is an area that the producer has some control over by adjusting feeding programs, using various management tools, etc.

Next, you need to locate the "rate" or "price" for the various components. The prices for these components are computed each month for all federal orders on the basis of component formulas or dairy commodity prices. For instance, if the average trading price of butter goes up, the price of butterfat paid to the producer will also increase. To get your total price for your milk components, multiply the number of pounds of each component shipped by the corresponding price paid. Seems pretty easy so far — but it gets harder.

Next, you may see something noted as PPD. This is the Producer Price Differentials. The PPD is the value derived via the federal order system from the marked price above and beyond the Class III (milk used for cheese) value. In affect, it is the economic benefit of the federal order system of classified pricing. These prices are announced for a base zone for the relevant order. For Federal Order 1, that base zone is in Boston, Mass., and for Federal Order 33, the base zone is in Cleveland, Ohio.

The PPD adjustment you see



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on your milk check makes an adjustment between the base zone in Boston (Federal Order 1) and the zone where your milk is shipped and processed. This may increase or decrease your PPD value, depending on which zone your milk plant is located.

Another segment of your milk check is milk premiums. Over-order premiums are payments in excess of federal order minimum prices. Usually, these are collected on Class I fluid sales. In Pennsylvania, fluid milk produced, processed, and sold in the state is often subject to an over-order premium. Those premiums are then pooled by the individual buyers of milk on a plant-by-plant basis, and are paid back only to the producers that supply these plants. Thus, dairy producers shipping to a bottling plant may receive 90 percent of the announced premium, whereas dairy producers shipping to a manufacturing plant may receive 30 percent of the announced price.

Milk quality premiums are bonuses producers receive for producing high quality milk. Many factors go into determining quality premiums, such as somatic cell count, bacteria count, PI count, etc. This is another area of the milk check which is under the producer's control.

Another area of your milk check will denote your "deductions." There are four major deductions on the milk check each month. They are federal advertising/promotion, cooperative/marketing fees, hauling, and half-month advance payment.

The federal advertising and promotion program mandates a flat rate deduction of \$.15 per hundredweight, sometimes called caratweight, or CWT, on all milk sold. The cooperative and marketing fees may be deductions for capital retains and administrative expenses in a cooperative, or various marketing service fees for noncooperatives. Hauling rates are fees charged to haul your milk to the processing plant, and half-month advances are a partial payment on the first 15 days of milk shipments.

For a more in-depth study of milk pricing, please see Ken Bailey's Staff Paper #333, "Understanding Your Milk Check," or contact your local extension agent.

## Agriculture Insights

**The Lancaster Chamber**  
of Commerce & Industry

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### APPEARANCES COUNT IN PUBLIC PERCEPTION

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In any business, it is useful to step back and look at your operation through your neighbors' eyes. This is especially important for agricultural producers in south central Pennsylvania, with an increasing number of neighbors who have little or no experience in animal agriculture. What your neighbors see from the road

will shape their opinion of your business.

What can producers do to improve this perception while maintaining a profitable operation? One area of focus is our environmental stewardship. Many of our nonfarm neighbors are becoming much more interested in how we are managing the natural resources within our operation, including streams, flood zones, and steep slopes. There is and will be opportunities to install BMPs (best management practices) on our farms. With partial cost-

We Love Our

# Dairy Farmers

The Cream Of The Crop