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STATE COLLEGE (Centre Co.) — Mastitis is the most common and costly disease of dairy cattle. When mastitis is out of control, it can be stealing up to \$200 per cow per year out of your pocket.

How can you tell when you don't have mastitis under control? You need to have at least two monitors: a record of all clinical cases of mastitis; and somatic cell count data, particularly individual cow data. Both of these pieces of information are essential if you are going to control mastitis, but for this article, we are going to concentrate on somatic cell count data and, in particular, somatic cell score (SCS).

The most common source for SCS is from the Dairy Herd Improvement Association (DHIA). It comes at a cost, and some dairy producers claim that they cannot afford it.

On an annual basis, the cost of mastitis may amount to more than \$11,000 for a 60-cow herd, or \$16 per cow, per year. In contrast, DHIA testing for somatic cells is less than 10 cents per cow per month. That is an opportunity-tocost ratio of 160:1. DHIA testing for somatic cells can pay generous dividends.

How does one use somatic cell data to recover these dividends? Let's explore this opportunity first with individual cows, then later with groups of cows.

Use Of SCS With Individual Cows

The first step in using your DHIA SCS information is to find you herd average SCS and identify all the cows in the herd with an SCS greater than 4 (SCS > 4).

Once you have found this information, you need to answer the following questions:

• Is the percentage of cows with SCS>4 higher this month compared to last month?

• Is your herd average SCS greater than 3?

• Do more than 30 percent of your cows have SCS>4?

If you answer "yes" to any of these questions, you have a mastitis problem and you need to make mastitis control one of you top priorities.

But where to start?

If you are having problems maintaining your milk market because of a high somatic cell count, you can take some measurers to bring it under cotnrol by using your DHIA information.

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Usually, 5 percent of the highest SCS cows can account for 10 to 50 percent of the cells in the bulk tank. Identify the cows with the highest SCS and look at their percentage contribution to the tank. Segregation of the milk from these cows from the bulk tank can bring your herd average SCS well within legal limits.

When practical, the removal of these cows from the herd will reduce the spread of contagious mastitis from these infected cows to clean cows. This measure will do much to keep future SCS low, if appropriate mastitis control measures are used.

Identify cows with SCS>5 (severely infected), those with an

SCS>4 for two consecutive months (chronically infected), and those with an SCS that for the first time is between between 4 and 5 (mildly infected). These cows are important,

because they represent significant loss of milk to your bulk tank. The milk loss per cow per month is estimated as 45 pounds for each SCS greater than 2.

As an example, if the SCS for a cow is 8, then milk loss can be calculated as: 8 minus 2 equals 6.

Six times 45 equals 270 pounds of milk loss for this cow on this month. This can represent a loss of \$32.40 for the lost milk production.

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How Does Your Herd Compare?

STATE COLLEGE (Centre Co.) — These data are calculated using information pulled from Pennsylvania DHIA's mainframe computer each week. It is a one-week summary representing approximately one-fourth of the herds on test, as they are tested monthly.

These data are valuable from a business management standpoint and can be used for comparing your operations to the averages from about one-fourth of the herds across the state.

DHIA Averages for all herds processed between 1/22/95 and 1/29/95



Number of Herds Processed	946
Number of Cows Processed	59,714
Number of Cows Per Herd	63.1
Milk Per Cow (Lbs)	18,600
%-Fat	3.70
Fat Per Cow (Lbs)	689
%-Protein	3.21
Protein Per Cow (Lbs)	597
Average Days in Milk Per Cow	318
*Value for CWT Milk(\$)	13.11
*Value for CWT Grain(\$)	7.88
*Value for CWT Hay(\$)	4.29
*Value for CWT Silage(\$)	1.54
*Value for Pasture Per Day(\$)	.27
*Value for Milk Per Cow Per	
Year(\$)	2,440
*Feed Consumed Per Cow Per	
Year(Lbs)	
A: Grain	7,373
B: Hay	2,102
C: Silage	15,294
D: Day Pasture	63
*Feed Cost Per Cow Per Year(\$)	
A: Grain	581
B: Hay	90
C: Silage	235
D: Pasture	17
"Total Feed Cost Per Cow Per	004
r car(\$)	924
Income Over Feed Costs Per	1 616
I Car(a)	1,515
*Grain to Milk Ratio	1:2.5
Avg Level For 871 SCC Herde	344 052
Avg Level For 8/1 SCC Herus	544,952
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