

EXTENSION CORNER

Sire Evaluation for Somatic Cell Scores

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The USDA Animal Improvement Programs Lab (AIPL) has developed a sire evaluation program for the genetic improvement of mastitis resistance. Plans are to release this information on sires with January 1994 genetic evaluation summaries.

AIPL calculates and publishes genetic evaluation for production traits (milk, fat and protein) using DHIA records. Genetic evaluations for mastitis resistance will be produced from DHIA somatic cell count data on daughters or individual sires with procedures similar to those used with production traits. Somatic cell counts (raw scores) will be converted to somatic cell scores (SCS) for the evaluation.

Geneticists caution that dairymen should not over emphasize mastitis in their sire selection strategy. They agree that

production should continue to be the major component when selecting sires. However, when bulls with similar production values are available, it would be prudent to select those with the lower SCS evaluations. It should also be pointed out that no amount of selection intensity for lower SCS scores with replace good management in controlling mastitis.

Other changes in the January 1994 sire evaluations are (1) adjustment to the milk, fat, protein dollar values (M,F,P,\$) to account for the cost of additional feed required for the higher production by daughters of the higher ranking sires, (2) inclusion of production life (PL) in the new evaluation index and (3) creation of a Net Merit (NM) index that will include the production traits as well as the SCS and PL values.

Values from the Net Merit index have been compared to those from the M,F,P,\$ index for a large sample of sires. The correlation between the two indexes is 0.96. Thus, there will not be a lot of change in the rankings of individual sires when the January 1994 summaries are published.

Multiple Component Pricing is Here

Multiple Component Pricing can be defined as a method in which the pricing of milk uses all the components of milk, including butterfat, protein and/or solids-not-fat. The dairy industry has priced milk, based on weight and butterfat content, since the early 1900's. For sometime now the system has not been reflective of commercial demand in the market place. To be more specific, the consumers are demanding lowfat dairy products.

Multiple Component Pricing would send the consumer a more positive and accurate market or economic signal.

So far in Pennsylvania, federal order 36, which comprises Eastern Ohio-Western Pennsylvania; the MCP has taken effect and is being used to price milk.

Low Somatic Cell is also important to the MCP. For example, Producers A and B have milk with identical protein content but differ greatly in somatic cell counts (SCC). Producer A has a SCC of 150,000 while producer B has a SCC of 900,000. Producer A is more desirable because of the greater value to cheese manufacturers. The rule of thumb is that cheese yields increase as SCC tests decrease. When all summed up in one sentence, high protein/low SCC milk has the most economic value.

Let's take a closer look at the impact somatic cell can have on the MCP. The table enclosed shows the somatic cell adjustment that would be made for each pound of protein.

Somatic Cell Adjustment as Recommended for December 1992	
Cheese Price \$1.2041	
Somatic Cell Counts	
	Adjustment Per Pound Protein
<100,000	\$ 0.11
100,000 - 199,999	\$ 0.08
200,000 - 299,999	\$ 0.04
300,000 - 399,999	\$ 0.02
400,000 - 499,999	\$ 0.00
500,000 - 599,999	(\$ 0.02)
600,000 - 699,999	(\$ 0.04)
700,000 - 799,999	(\$ 0.06)
800,000 - 899,999	(\$ 0.08)
> 900,000	(\$ 0.11)

For example, if producer A is less than 100,000 somatic cell count, than for each pound of protein, a positive 11 cent adjustment will be made.

However, in another situation where producer B would have a somatic cell of more than 900,000, that producer would be deducted a total of 11 cents per pound of protein.

Let's examine the somatic cell adjustment on a per hundred weight

basis. If producer A and Producer B have a 3.2 percent protein content. To determine the effect, multiply the appropriate somatic cell adjustment by the protein content to calculate the somatic cell adjustment on a per hundredweight basis.

To illustrate, Producer A would receive a positive 35.2 cents per hundred weight of milk (3.2 x 11 cents) somatic cell adjustment. In another situation Producer B would have a negative of 35.2 cents per hundredweight of milk (3.2 x 11 cents) somatic cell adjustment. This essentially means that 35.2 cents per hundred weight would be deducted from Producer B's milk check.

Basically, a producer who maintains a butterfat of 3.5% and a protein of 3.2%, and maintains an acceptable somatic cell count, will maintain the same milk price as shown under the traditional pricing. (See example below)

MCP EXAMPLE

Assumption:
Blend = \$13.50 @ 3.5% BF
B.F. Differential = 7.0 cents
Butterfat = 3.5%
Protein = 3.2%

Traditional Pricing: \$13.50 Blend

MCP Example:	
Fat	3.5 pounds x \$.80 = \$2.80
Protein	3.2 pounds x \$3.00 = \$9.60
Class I & II Share of the Market	= \$1.10
Total	\$13.50



NEW MEMBERS Since June to November, 1993 by County

- Armstrong:** Fred Mattilo
- Beaver:** Douglas Farms
- Bedford:** Kidds Cows, Charles Mowry, Claycomb Jerseys, Clouse Bros
- Berks:** Bruce S. Zuber, Evan Lotollette, Peaceful Valley Farm
- Blair:** Tri Buch Farm
- Bradford:** Robert L. Jennings, Walt Shaffer, Brent MacWhinnie, Lyle & Donna Molymoux
- Butler:** Chuck & Patty Rassau
- Centre:** Elam Stoltzfus, Daniel K. Lapp, Dave Chveichko, Morris Z. Stoltzfus, Paul Brown
- Chester:** Donald L. Kauffman #2, Samuel A. Stoltzfus, John E. Esch, Ephraim R. Lapp, John King
- Clinton:** Mr. & Mrs. Chrisemer, Elam B. Stoltzfus
- Columbia:** Pen Col 2, Sad Acres
- Crawford:** M.K. Firth, Spring Valley Farms, Forget Me Not Farm
- Cumberland:** Clouse Bros. Dairy
- Dauphin:** Kenneth Stoltzloos
- Erie:** Ed Majerik
- Fayette:** Arnold Farm
- Franklin:** Truman Martin, Franklin Offutt, Roger A. Garber, George E. Mason, Dana Funk, Marlin G.

- Bricker:** Fred M. Garber, Clair E. Garber, Chris Gold
- Holsteins:** Chris Gold
- Guernseys:** Pleasant Valley
- Jerseys:** Herbert D. Frey, Jay Grove
- Fulton:** Nelson Ocker
- Huntingdon:** Lemm Farm
- Indiana:** Robert Lydic
- Juniata:** Stuart D. Imes, Warren S. Auker, Gerald Spigelmyer, Elvin Ranck, Gerald Hat
- Lackawanna:** Louis & Samuel Spadine
- Lancaster:** Kenneth Hainish, Samuel F. Zook, Star Rock Farms, Bernard Fittery
- Lawrence:** Brad Wilson, Hideaway Dutch, Scott Snyder, Richard Martin
- Lebanon:** Jonathan Summy, David & Donna Blatt, Gary & Lisa Krall
- Lycoming:** Lynn Reece, Fainsworth Farms Inc
- McKean:** G.L. Carlson Inc. No 4
- Mercer:** Joe Bloss, S & L Farm, Chestnut Ridge

- Mifflin:** Eugene F. Byler
- Montgomery:** Chester Soltys, III
- Northampton:** Blau A. McCloskey
- Perry:** Reuben Riehl
- Somerset:** Dreamway Acres
- Sullivan:** Richard R. Higley
- Susquehanna:** Robert Reyan
- Tioga:** Joe & Brenda Cochran, David E. Weeks I, David E. Weeks II, Kerek Farms, Dave & Deb Richard
- Union:** Mae De Farms, Midge Meadows, Norman N. Martin, Scott Hollenbach, Cold Run Jerseys
- Warren:** Richard Harrington, Daryl Odell, Mark Lawson
- Washington:** Hildreth Dairy Acres



Winter District Meetings

The November Fall District Director Meetings are finished and it's now time to prepare for the district DHIA Winter meetings to be held in January or February. The districts that will need to hold meetings are the districts where an election needs to take place. It was agreed at the Fall District Meetings that other districts may meet with those districts where elections need to take place and an agenda will be sent to the local committees for them to make those decisions.

The change in bylaws and new districts will go into effect January 1, 1994. This change will separate the state into smaller districts for state representation. The following will outline the districts where some meetings have been held and some need to establish a date and place. The nominating committee from each county will need to contact the other counties in their district. These meetings need to take place after Jan. 1, but before the annual meeting of Feb. 18, 1994. They are as follows:

District 1 & 2, To be decided.

District 3 & 6 Ramada Inn, Somerset, Feb. 9, 1994.

District 4, Oxyok Restaurant, Galeton, Jan. 20, 1994

District 5, To be decided.

District 7 & 8, To be decided.

District 9 & 10, To be decided, possibly Carlisle.

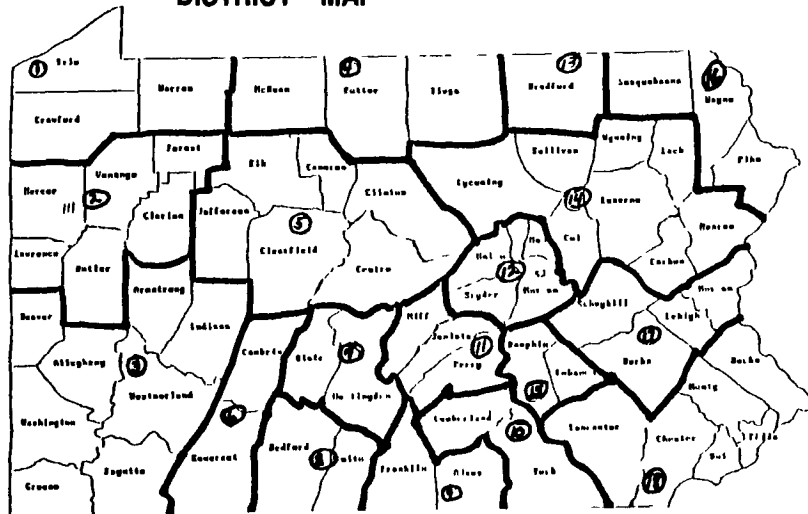
District 11, Family House Restaurant, Mifflintown, Jan. 25, 1994.

District 13, 14, 16, Pink Apple Tunkhannock, Jan. 20, 1994.

Districts 15, 17, 18, Berks Ag Center, Feb. 1, 1994.

Those districts that will need to hold election for State Directors are Districts 18, 17, 14, 12, 11, 8, 5, 4. Terms expiring in District 5, Frank Orner, District 8, Steve Mowery, District 11, Brooks Smith, District 14, Joe Lyons, District 18, Norman Hershey. District 4 and 12 currently have no director and District 17 will need to hold an election as they presently have two, Don Duncan and Dennis Daubert.

DISTRICT MAP



1993 DIRECT MEMBER COUNTIES

During the last year Twelve Counties have voted to become direct members of Pennsylvania Dairy Herd Improvement Association in 1993.

Luzerne County merged January 93 with 22 herds, 1,117 cows on test.

Perry County merged January 93 with 76 herds, 4,967 cows on test.

Westmoreland County merged March 93 with 61 herds, 3,095 cows on test.

Potter County merged as of May 93 with 36 herds, 2,505 cows on test.

Bedford County merged as of July 93 with 149 herds, 9,989 cows on test.

Fulton County merged as of August 93 with 45 herds, 2,903 cows on test.

Blair County merged as of August 93 with 115 herds, 8,829 cows on test.

Tioga County merged as of August 93 with 191 herds, 9,735 cows on test.

Clinton County with 40 herds, 2,147 cows and Huntingdon County with 104 herds, 7,959 cows as of Nov 93.

Effective January 1, 1994 Erie County with 120 herds, 5,997 cows and Susquehanna County with 134 herds, 7,485 cows.