

EQUITY: A MILK PRICING REVOLUTION ACHIEVED

They were 127 words that proved destined to change the way an entire industry priced its product.

"That The American Jersey Cattle Club and National All-Jersey Inc. through their members and staff undertake a nationwide project which has as its aim, the establishment of an equitable pricing system for milk in the USA. A further aim of the project would be to develop specialized markets (e.g., cheese plants, etc.) which sellers of higher than average protein test regardless of breed could be financially awarded for their product in relationship to its yield of finished product.

"Be it further resolved:

"That funds to establish and maintain this project would be generated from a voluntary check-off of 2¢ per cwt. on all milk shipped by the participating dairymen. These funds would be expended through the AJCC and NAJ to accomplish the aims and goals of this project."

Twenty-five years ago, on March 2, 1976, this resolution was adopted concurrently by the Boards of The American Jersey Cattle Club (now Association) and National All-Jersey Inc. In retrospect, one can sense both the frustration and the resolve of the Directors. For Equity was born of a near-desperate situation in the dairy industry, and one particularly galling to all producers of quality milk, regardless of the breed cows they tended.

Per capita consumption was continuing its 30-year downward slide. The primary culprit was a bottle of milk that was watery and chalky, unappealing to consumers of all ages. Yields of manufactured products were so low that cheese plants were paying more for raw milk than what they could recoup from the product. At the core of the matter:

- Minimum standards so low that an Extension publication could report that the "legal base allows nearly 3% added water in average milk supplies," and
- The failure of the milk pricing system to tell producers what consumers wanted, and to provide equitable payment for the nutritional content of their milk.

So large were the problems, in fact, that they seemed beyond the industry's ability or collective will to change them.

But solutions and profound change come from the bottom up, not the top down. And that was the genius of Project Equity.

The First To Pay For Protein

The first watershed event occurred on August 1, 1973 when Mississippi Valley Milk Producers Association (MVMPA) of Davenport, Iowa, began paying for protein.

The association had four bottling plants, one ice cream plant, one cottage cheese plant, four hard cheese plants, and one non-fat dry milk and butter operation. Its management knew, better than most, the array of problems with slim operating margins, declining milk sales and less-than-acceptable product yields.



Carl Zurborg



G. Joe Lyon



C. A. Ernstrom



Guy M. Crews

It was also blessed with responsive leadership. Then general manager Carl Zurborg recalled at the 1978 American Dairy Science Association (ADSA) meetings, "From the early '70s, we had been getting questions from our members at district meetings: 'When are we going to be paid on the solids or protein basis for our milk?'"

In this same period, according to former

Executive Secretary J. F. Cavanaugh, the staff of the Jersey organizations were under direction from the two Boards "to get equity in the marketplace for larger numbers of Jersey owners. Field trips were made into Iowa, Minnesota, Wisconsin, New York, Pennsylvania and California," but the first to yield fruit was with Mississippi Valley.

NAJ's Guy Crews "made several pilot trips," visiting with the MVMPA leaders in the company of G. Joe Lyon, who was then President of the AJCC. Their success in communicating what Crews called "known and demonstrated facts" about cheese yield and its relationship to protein composition, and how to use a premium to increase protein yields, was well received by Zurborg and co-op president Elmer Paper. His own co-op unwilling to even consider protein pricing, Lyon switched his membership to MVMPA in anticipation of its adopting protein pricing. When that happened and he received the first milk check, it was \$300 greater than before. Lyon was now serving as a Director of National All-Jersey, and such reports to that Board gave early hope for the goal of a better price for all high-protein milk producers, at least some day.

"We cannot give Carl, Elmer and the Board of Swiss Valley enough credit," Lyon said recently. "They got protein pricing out into commercial use. NAJ wasn't in the position to make it happen until we found someone who would buy milk that way."

By early 1976, NAJ's other milk marketing representative, Phil Badger, was having success with two California milk buyers. As Cavanaugh explained, "The national Boards decided that an effort should be made to provide this service to those getting the benefits at 2¢ per cwt." They began to see a larger project, one that might "continue and expand this work which would be so beneficial to everyone who milked Jerseys."

In the end, the nationwide project for Equity in the marketplace was born at the March, 1976 meetings of the AJCC and NAJ Directors. It was launched during the 1976 Annual Meetings in Staunton, Va.,

and Joe Lyon was clear in how the organizations would proceed toward the goal:

“Cooperate with those who understand our problems . . . Educate those who are not knowledgeable . . . Oppose those organizations that refuse to recognize the facts presented to them.”

Even though both Boards voted to appropriate \$50,000 each over the next three years for funding the project, that money was never needed. From the very beginning, through the generous investments of people who believed in the idea of Equity, the campaign was self-supporting.

In The Trenches

For almost a decade, the Equity Project was focused on developing voluntary multiple component pricing plans, usually for proprietary cheese plants in areas able to supply sufficient quantities of high-component milk.

Such efforts required pricing formulas and yield data, which National All-Jersey had already accumulated through research done at Utah State University, The Ohio State University, and Mississippi State University. As early as 1974, C. A. Ernstrom of Utah State had addressed the Western Jersey Association about marketing milk on the basis of product yield. While L. L. Van Slyke had demonstrated in 1949 that cheese yield could be predicted on the basis of fat and protein tests, it was a practical nightmare to implement. However, Dr. Ernstrom said, automated analysis of milk components (infrared protein testing equipment was beginning to be used) and computerization would make cheese yield pricing feasible for even small manufacturing operations.

Selling plants on voluntary MCP, and helping them procure high-component milk, proved to be the ultimate test of face-to-face salesmanship.

“I think of the number of times we went into cheese plants and made cheese out of high protein milk to show the cheesemaker the

Multiple Component Pricing Timeline

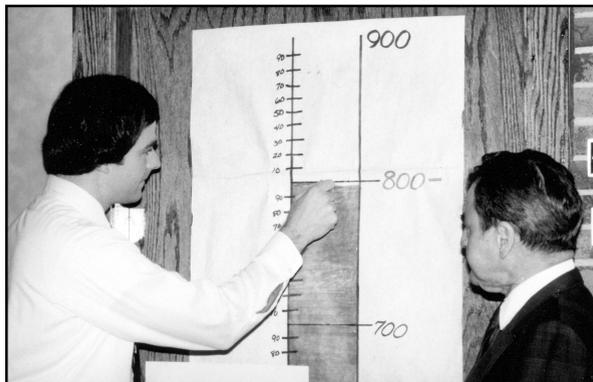
| Federal or State Order | Year Implemented |
|-----------------------------------|--------------------|
| California | 1962 (class I) |
| California | 1969 (all classes) |
| Great Basin | April 1988 |
| Middle Atlantic | January 1992 |
| Eastern Ohio-Western Pennsylvania | October 1993 |
| Ohio Valley | October 1993 |
| Indiana | October 1993 |
| Pacific Northwest | May 1994 |
| Southwestern Idaho-Eastern Oregon | May 1994 |
| Southern Michigan | October 1995 |
| Chicago Regional | January 1996 |
| Upper Midwest | January 1996 |
| Iowa | January 1996 |
| Nebraska-Western Iowa | January 1996 |
| Eastern South Dakota | January 1996 |

All of the above were before Federal Order Reform and the new 11 consolidated Federal Orders that were implemented on January 1, 2000.

Then on January 1, 2000, MCP in seven of the 11 consolidated orders.

extra yield,” recalls Calvin Covington, former AJCA-NAJ Executive Secretary and Chief Executive Officer. “I remember one plant where we increased the yield so much, the agitator paddles would not turn. At another plant, the yield increased so much they closed the plant down an extra day a week.”

Edelweiss Cheese of Marshfield, Wis., was the first to be sold on protein pricing, to be joined by others in a steady progression. By 1985, an editorial in the *Jersey Journal* reported that “practically every drop of milk produced in Wisconsin that



The 800 in '80 campaign for Equity members was critical in providing the funds to support the manpower, in the persons of Calvin Covington (left) and Guy Crews (right), for securing voluntary MCP markets in the Upper Midwest. Not only did that work result in additional income to high-protein producers, it delivered a market-based demonstration of other important claims: better cheese yields and improved plant profitability.

is purchased by a cooperative or a proprietary handler is bought under some form of Equity pricing. The Jersey dairyman producing 3.8% to 3.9% protein milk is getting from 50¢ to \$1.00 more per hundred-weight than he was three years ago.”

Taking Aim At Federal Order Pricing

In stating a goal of “a nationwide project which has as its aim, the establishment of an equitable pricing system for milk in the USA,” it was clear that the Equity Project had in its sights the skim-butterfat pricing scheme used within the Federal Milk Market Order (FMMO) system. This, perhaps as much as any objective, was the focus of derision from some in the industry. “A small group of Jersey breeders will never persuade USDA to change milk pricing.”

There was some basis for industry observers to be skeptical, for skim-fat pricing had been in place since World War II and the Federal orders were notoriously resistant to change. But, as critics noted, the market signals sent forth by that pricing system were now irrational. Said Oregon-Washington extension economist H. A. Luke at a 1973 ADSA milk pricing symposium, “We have some of the wrong incentives in our present system . . . the economic system in most areas of every country pays the same for a hundredweight of skim milk regardless of its composition. The same industry which rewards cows for skim milk regardless of its water content, also provides penalties if the water is added later.”

The solution, University of California economist Robert Jacobsen commented, was “explicit component price values, and we need to adjust them so that in fact, we can reward the component selection that the market tells us should be made.”

NAJ’s ability to create voluntary component pricing plans and show that they worked, was ample evidence in support of such claims. According to Covington: “What we said was true. Research showed

it to be true.”

In late September of 1985, the groundswell of support for multiple component pricing in areas of high manufacturing milk use finally had an impact upon a Federal Order proposal.

“Western General Dairies, Inc. and Lake Mead Cooperative Association have developed a pricing plan whereby producer milk will be priced to handlers, and payment from handlers to producers will be based on a fat value, a protein value and a differential value,” wrote market administrator Joe Albright. These handlers, he added, planned to request USDA to use this pricing system in a merged Great Basin and Lake Mead Federal Order.

The plan, developed in consultation with H. Alan Luke, was supported by National All-Jersey through testimony and documentation by NAJ staff and retained consultants. Calvin Covington participated in the hearing held March 18 through 20 in Salt Lake City. Extensive review of testimony and of briefs submitted after the hearing was completed later that year, but USDA’s publication of the recommended decision was delayed by a change in its legal staff.

The hoped-for Recommended Decision was signed July 14, 1987. Quoting from the historic 96-page document:

“For the first time in the Federal milk order system, the proposed merged order includes a plan for pricing milk on the basis of its protein, as well as butterfat components.”

Basic concepts of the Equity program were introduced in the hearings, and the decision contained many of them:

“ . . . milk containing a higher level of protein has a greater value and should be priced accordingly.”

“ . . . payment of the same price for milk which will yield different amounts of the same product is inequitable pricing.”

“ . . . producers should be given an incentive to increase their production of protein relative to water in milk by being paid for protein at a level that reflects its value in manufactured products.”

“ . . . the operating efficiency of the entire dairy industry will be improved if milk is priced on the basis of the value of its protein or nonfat components, as well as its butterfat content.”

On February 10 of 1988, the Final Order was signed to implement MCP in the Great Basin order, effective April 1. In

terms of its impact upon milk marketing, the Great Basin decision was the equal, in Covington’s estimation, of the invention of the Babcock test for butterfat and the creation of the Federal Order system with its skim-butterfat pricing system.

Perhaps more importantly at this point, however, was the fact that, “This positive decision for the Great Basin Federal Order means the groundwork has been laid, objections overcome and the precedent set to make similar proposals in other Federal orders.” Little wonder, then, that at their June meeting, the National All-Jersey Board of Directors set a goal of implementing Multiple Component Pricing in all Federal Orders by the year 2000.

“A Turning Point”

National All-Jersey’s involvement in Federal Order proposals over the next several years continued in roles best described as “educator,” “facilitator” and “expert ad-

vocate.” Then came the opportunity to prepare and present a multiple component pricing proposal, this time for the five Upper Midwest orders.

As never before, Equity dollars were invested in marketing specialists and legal counsel to craft and present a proposal unlike any ever proposed. For the first time in any order, this MCP plan would determine the price of protein in producer milk directly from the value in consumer products, specifically the price of Cheddar cheese. The other Federal Order plans determined the value of protein indirectly, paying first for the butterfat and volume of producer milk, then shifting the residual value to protein.

In addition, a comprehensive MCP formula was proposed. All major components—protein, butterfat, and other solids—were included. This was a significant advance over the previous Federal Order MCP plans, which only priced butterfat

Policy Statements of National All-Jersey Inc.

The current policies of National All-Jersey Inc. relative to the pricing of milk, milk marketing programs, and minimum standards for fluid milk are little changed in intent and particulars from those which guided the formulation of the Equity Project in 1976. These stand in testament to the foresight of all those who supported the Equity initiative then, and continue to support it as the work continues today.

Milk Marketing Policy

Change the milk pricing system to one that will price milk based on its most valuable components, in accordance with their use in consumer products;
Promote continuing the implementation of equitable Multiple Component Pricing by individual plants and cooperatives;
Increase the minimum solids-not-fat, protein, and/or other solids standards for fluid milk; and
Support producer-funded dairy promotion and research programs.

Policy on Solids-Not-Fat Standards For Fluid Milk

National All-Jersey supports the adoption of a higher, more flexible solids-not-fat (SNF), protein, and/or other solids standards for fluid milk. At a minimum, the new standard should equal the average U.S. SNF content in raw milk (8.65% or true protein content of 3.0%) or exceed that level. In addition, processors should be able to adjust the SNF, protein, and/or other solids levels in raw milk either upwards or lower, as necessary to meet the new standard.

The current federal standard of 8.25% for the SNF content of fluid milk products is well below the national solids-not-fat content of milk as it originates on the farm. In order to maintain the integrity and nutritional quality of milk used in fluid milk products and to provide increased uniformity of products offered to consumers, it is important that federal solids-not-fat standards for fluid milk products be increased to or set above the average solids-not-fat content of producer milk. New technologies already in use in the U.S. and other countries allow for easier standardization of milk fat, protein and other solids without significant changes in flavor or other properties of fluid milk products. The U.S. standard for SNF content in fluid milk content should reflect both the natural levels of SNF found in milk, and allow use of the current, modern technologies available to adjust milk solids to the new standard.

Those Who Responded To The Call: Original Equity Investors (1976-1977)

The 171 individuals and corporate entities named below were the first to invest in the Equity Project, most often through a milk assignment of 2¢ per hundredweight.

| | | | |
|----------------------------------------------|------------------------------------|-------------------------------|-----------------------------------|
| Charles Ahlem, Calif. | Stephen H. Eddy, Vt. | Thomas P. Lain, Texas. | Hugh H. Robertson, N.Y. |
| Ralph Ahlem, Calif. | Don Egli, Iowa | Richard P. Lightfoot, N.Y. | Calvin Robinson, N.Y. |
| William Ahlem, Jr., Calif. | Phil V. Fanelli and Family, Calif. | James H. Lindsay, Calif. | David L. Robinson, Penna. |
| Charles G. Anderson, Calif. | Farinha Bros., Calif. | Paul Longenecker, Penna. | W. T. and T. J. Robinson, Ohio |
| Arco Farms, Ala. | James and Murray Fisher, N.Y. | Lyon Jerseys, Inc., Iowa | Vernon D. Roble, Minn. |
| Willard H. Ashton, Idaho | Robert Fleming, Ohio | Russell and Robert Lyon, Iowa | Harold W. Roller, Va. |
| Lonnie R. Barker, Mo. | Andy and Eddie Fugate, Mo. | Maine Jersey Cattle Club | H. Steven Roy, Ark. |
| Horace and Marion Bascom, N.H. | Funk Jerseys, Ill. | Wentworth Mann, Minn. | Willis Rupert and Sons, Ohio |
| Ed B. Baskin, S.C. | Andy and Eddie Funk, Iowa | Julius Manske, Wis. | Willard Sanford, Mich. |
| Stephen Batchelder, Ky. | Cletus Garver, Ohio | Joe K. Martin, Ga. | Roland and Margaret Sargent, Vt. |
| Harold L. Bell, Tenn. | L. Claire Gates, Iowa | Marion Masters, Mo. | Clayton W. Sawtelle, Vt. |
| J. Lawrence Benson, N.Y. | Harry Gleich, Wis. | L. H. McKee, Ore. | Richard and Patty Schonauer, Ohio |
| Thomas M. Benson, N.Y. | Jack Goncalves, Calif. | William Meeder, N.Y. | Ray and Margaret Schooley, Mo. |
| Ken and Jane Beswick, Calif. | Walter and Sally Goodrich, Vt. | Charles Metzger, Minn. | Hank Schooli, Calif. |
| John P. Bianchi, Inc., Calif. | George R. Gorniak, Wis. | John L. Miller, Va. | Kenraid Shields, N.Y. |
| John Bishop, VI, N.J. | Graber Jerseys, Inc., S.D. | Bernard Monson, Iowa | Edward O. Smith, Miss. |
| Henry W. Black, Maine | Catherine and Carl | Multi Rose Jerseys Inc., Iowa | George H. Smith, Kans. |
| Lewis Blacketter, Tenn. | Gravenkemper, Ohio | James R. Murphey, Ohio | James E. Smith, Iowa |
| John Bodzinski, Mass. | John B. Gund, N.H. | Robert A. Murray, Calif. | J. P. Souza, Calif. |
| Ralph D. Booth, N.H. | Merlin Haeuser, Wis. | Charles A. Newkirk, Ill. | Spahr Jersey Farms, Inc., Ohio |
| Albert H. Bradford, Maine | George and Karen Hanford, N.Y. | Leon F. Newton, Mass. | Staas Farms, Calif. |
| Edward and Eddie Brixen, Wis. | Les and D. J. Harris, Jr., Ohio | Noal Nicholson, Ind. | Lloyd E. Starn, Calif. |
| Charles O. Browder, Tenn. | James D. Harris, Jr., Tenn. | W. E. Nicklin, Iowa | Robert O. Stock, Iowa |
| Brycoed Farm, Penna. | Ralph Heitz, Wis. | H. Ward Nielsen, Idaho | Marshal Stone, N.Y. |
| W. C. and W. R. Burdette, Ky. | Paul H. Herr, Penna. | Nyman Brothers, Calif. | Paul and Svend Stowring, Calif. |
| Benjamin R. Buskohl, Wis. | Hi-Land Farms, Ray, David and | George W. Opperman, Iowa | Summit Farm Inc., Iowa |
| Paul Chamberlain, N.Y. | Greg Chamberlain, N.Y. | James and Georgia Pappas, | Larry Thoma, Iowa |
| James Chaney, Ky. | David E. Hinton, Tenn. | Calif. | Hugh Thompson, Tenn. |
| Stanley and K.B. Chittenden, N.Y. | Perry and Carol Hodgdon, Vt. | Alvin M. Patterson, Penna. | Robert W. Ulrich, Penna. |
| Paul C. Chittenden, N.Y. | Robert and Marge Hodgson, Wis. | John K. Paxton, Penna. | Dale Van Heiden, Iowa |
| Circle B Farms, Calif. | Holmes Farm, N.H. | Pearson & Coupe, Calif. | Edward A. Vander Veen, Wis. |
| Richard Clauss, Calif. | Homan Jersey Farm, Inc., Iowa | Allen Pendleton and Son, Ky. | William Vorn Holt, Ohio |
| Robert L. Copeland, Ohio | George W. Hough, Penna. | Peterson Bros., Calif. | Charles Wallinga, Minn. |
| B. S. Cunningham, Ill, Ky. | Walter Howard, Mass. | Pletts Jersey Dairy, Calif. | William C. Weldy, Ohio |
| Jack and Mary Davis, N.Y. | Stanley Johns, N.Y. | Terry Wayne Potts, Ky. | Claire Werner, Iowa |
| Scott Davis, N.H. | William H. Johnson, Va. | Bernard Pralle, Wis. | Colby Whitcomb, Maine |
| Joe R. Deus, Calif. | Garry Jones, Ind. | Ben Purlee and Son, Ind. | Duane Wickstrom, Calif. |
| Marcell Dickens, Calif. | Melvin Keller, Okla. | Walter and Edith Pyle, Vt. | Vernon D. and Mary Wickstrom, |
| William and Susan Dietrich, Penna. | James and Janet Kelly, Penna. | Annette L. Raus, N.Y. | Calif. |
| Dr. Robert C. and Helene Z. Dreibach, Penna. | Wayne D. Kester, Jr., N.Y. | Douglas C. Reaves, Vt. | Robert C. Willaman, Penna. |
| Sheldon Dunks, Mich. | LaMar King, Ohio | Ralph Reichert, Kans. | Wyatt A. Williams, Va. |
| | Pearson Knolle, Texas | John Rhodes, Neb. | George B. and Frank W. Wilson, |
| | Dwight Krebill, Iowa | George Rich, N.Y. | N.Y. |
| | Gene Krekel, Iowa | Bruce Rigler, Texas | James E. Young, N.Y. |
| | David C. and Donna Kunde, Iowa | Donald J. Rivers, Wash. | Ralph Young, N.Y. |

and protein, or butterfat and other solids.

To support the proposal, filed July 15, 1992, National All-Jersey secured a coalition of the leading cooperatives from the region. It was a considerable investment of money, plus staff time and organizational resources, but one that yielded remarkable results. Only nine months after its public hearing from January 25 to 27, 1994 in Bloomington, Minn., the USDA issued a Recommended Decision patterned on NAJ's proposal. The Final Decision became effective January of 1996.

It brought to 53% the amount of Federal Order milk priced under multiple component pricing. It was also the first time in history any organization not directly marketing milk in a Federal Order has had a major proposal accepted.

The Groundwork Laid, Objections Overcome

"A turning point in NAJ's 20-year effort to promote a consumer-oriented and

market-responsive milk pricing system for all 38 U.S. federal orders," Covington commented. Evidence for that claim came with the Federal Order developments later in 1996 and during 1997.

Multiple component pricing was one of only three Federal Order price issues specifically mentioned in the Federal Agricultural Improvement and Reform Act of 1996. Into the window of opportunity presented by FAIR, National All-Jersey submitted a comprehensive proposal, recommending adoption of end-product pricing for all classes of milk. Much of that proposal was included in the recommendation handed down by USDA in 1997, and was ultimately extended into the MCP plan for seven of the 11 consolidated orders, and 85% of all Federal Order milk.

Gains Beyond Imagination

On this, the Silver Anniversary of Equity, we look back at its history and consider what it has helped accomplish by

changing the way milk is priced in the United States.

It would be enough—more than enough—to point to January 1, 2000 and the role that National All-Jersey Inc. played in implementation of multiple component pricing (MCP) as part of Federal Order Reform.

It would also be sufficient to remind ourselves that, through voluntary MCP plans, hundreds of millions of dollars have been returned to producers, a return of enormous proportions on the \$4,189,971 invested in Equity in its first 25 years.

But above all, the project of Equity, and the manner in which it was pursued, constructed understanding and alliances throughout all segments of the industry. It created an unprecedented degree of co-action that sought solutions for problems, and as a result strengthened the dairy industry for all.

And because of that, the returns from Project Equity have been priceless.

MCP Creating Change in Dairy Industry

When National All-Jersey's Equity program was launched in 1976, one of its two goals was the nationwide implementation of an equitable milk pricing plan—a system that would pay for producers' milk based on the value of its most valuable components—protein and fat—according to their use in consumer products.

Ten years have passed since the historic implementation of multiple component pricing (MCP) on January 1, 2000, in seven orders producing 85% of all milk marketed under the Federal Milk Marketing Order system. What has been the impact of multiple component pricing for the dairy industry?

Changes in average component levels within orders.

The proponents of multiple component pricing said that it would give dairy producers the proper economic incentive to breed, feed and manage their herds over the long term to produce the milk components of greatest demand by processors and consumers. Without question, it is clear that MCP pricing signals have affected component levels, particularly for protein.

Prior to Federal Order reform, milk produced in New England, New York and New Jersey (now Order 1) was priced on a fat-skim basis. For the year 2000, milk produced in that order averaged 2.99% protein. For 2009, the average protein for Order 1 milk has increased to 3.06%, a gain of 0.07% in 10 years. At \$3.00 per pound, that is an additional 21-cents per hundredweight (cwt.).

Similar changes have occurred in marketing areas that had component pricing before Federal Order reform. Here, the Pacific Northwest order (124) is a good example. Order average protein test was 3.02% for 2000, but at the end of 2009, it was 3.11%, a gain of 0.09%.

Equitable pricing. Yields of manufactured products are determined by the levels of components in the milk; for cheese, those components are milkfat and protein. High-solids milk improves the operating efficiencies of

manufacturing plants. In short, milk containing higher component levels has greater value to the processor and should be priced accordingly.

Jersey producers in orders paying on MCP received between \$2.50 and \$3.00/cwt. more than fat-skim pricing in 2008, and between \$1.40 and \$2.00 more in 2009. Order-average milk was worth \$0.25 to \$1.07/cwt. more in 2008 compared to what fat-skim pricing would have paid. In 2009, the advantage from MCP ranked from \$0.26 to \$0.87/cwt.

Structure of the U.S. dairy cattle population. The color of the dairy industry has changed since January 1, 2000. Estimated from DHI cow enrollments, Holstein cattle comprised over 92% of the U.S. cow population in 2000, and Jerseys just 3.7%.

Ten years later, the Jersey population has grown to 5.2%, the Holstein share is 87.6% and another 6.6% of dairy cows are located in what DHI calls "mixed" herds—herds made up of cows from different breeds as well as crossbred cattle. We can only speculate on how many Jersey and Jersey-sired cows there may be in those herds, but if it were just 25%, the Jersey estimate would increase by about two percentage points.

The cumulative impact of longer productive life, increased semen sales, but above all Jerseys' ability to produce milk's valuable components more efficiently are now clearly evident in the structure of the U.S. dairy cattle population.

On its tenth anniversary, the bottom line of the multiple component pricing story is this. When dairy producers are given the proper economic signals to produce the kind of milk the market demands, they can and will respond. Nearly 41% of U.S. milk goes to cheese plants, and protein, milkfat and solids are the products of value in the export markets. Market signals favor the efficient Jersey cow.