

Not Crossbreeding, But Expansion at Martin Dairy

I've probably been tinkering with the crossbred thing a good 15 to 18 years," Norman H. Martin told recent visitors to Martin Dairy, located on the southern border of that famous cheesemaking town of Tillamook, Oregon. "We have always had the crossbreds."

Crossbreds for fertility. Crossbreds for calving ease. Crossbreds for more fat and protein. That's why they were born, and for all of those reasons they have put a little more money into the checking account of Martin Dairy.

There's a lot of crossbreeding going on these days, creating great demand for Jersey semen and Jersey bulls. However, there's something more going on with the Cal-Mart herd. The 95 or so cows and heifers that have recorded ancestors of two breeds are anything but "just crossbreds." They are on the track to becoming all Jersey, through the American Jersey Cattle Association's Jersey Expansion program.

How Jerseys Evolved at Cal-Mart

The story of how Martin, a third-generation Holstein dairyman whose home-stead dairy was near Hanford, Calif., became a Jersey milk producer is truly unique.

"I started using Jersey bulls on our Holsteins as a conception improver," Martin said, recalling research at Washington State University that showed conception could be increased by 3% to 5% by putting two

bulls together. "Because all of my Holsteins were registered—and there were 1,900 of those, and I didn't want to go through the trouble of bleeding the calf and bleeding the dam to register the calves—I figured if I used a Jersey bull, at least I'd still have a milk cow."

"When I started using the two breeds together," he continues, "I was a little bit concerned about who I was going to breed the crossbreds back to. I wasn't getting into the Jersey business at the time, so I thought the best thing to do is breed them to another crossbred such as themselves. I raised a crossbred bull calf, collected him and slaughtered him, and used the semen on our crossbreds to maintain the 50-50 mix."

About the same time, Martin's cooperative was considering cheese yield pricing. "Being involved at Select Sires (on the Holstein sire committee), I used to go sit in on the Jersey meetings and see what was going on," he says. "I thought that this was going to happen, so I actually went out and started to get into the Jersey business. I got up to 250 head for about a year and a half. All of a sudden, the cheese yield thing never came to be, so I just got out of the Jerseys at that time. But I never lost my interest in them."

Then, in 1995, looking for a stable milk market, the Martin Family—Norm and wife, Gwen, plus son Chad and his wife, Fran, and daughter Rhonda and her hus-

band Fernando Silveira—dispersed the majority of the Holstein herd and moved to the northern Oregon coast. "We brought about 80 Holsteins and went out to buy the Jerseys because at that time we didn't own any. It took about a year or so to get up to 400 cows: 200 Holsteins and 200 Jerseys milking." And, of course, there were crossbreds.

When in early 1998 the Tillamook cooperative changed its pricing to reward higher fat and protein milk, "I decided we were going to go to all Jerseys. All of our Holstein heifers were sold. By December of 2001, we had sold off the balance of the Holstein cows we had left.

"I kept all of the crossbreds and started breeding them to Jersey sires, then registering them with the Association."

Lessons Learned

More than 250 animals with a Cal-Mart prefix have been recorded with the AJCA through Jersey Expansion. As J1s produced OAs, and OAs produced PRs, none have been particularly memorable to Martin. That's not the case with the first GR-prefix calf, sired by DeBoer Jenetta Barber Bill-ET and born on August 1. "I know that one: 8177. That was our first 15/16ths."

On August 2, he applied for the calf's registration via infoJersey, the AJCA's online registration site, and her green-bordered certificate was in hand to show visi-



These 75% Jersey cows—variously sired by one or two generations of Registered Jersey™ bulls and identified accordingly as J1s or OAs in the AJCA database—averaged 83.3 lbs. milk for the August 24 test at Martin Dairy, Tillamook, Ore. The average of their current 305-day actual projections is 20,010 lbs. milk, 845 lbs. fat and 677 lbs. protein. Average appraisal score is 84.3%, with three unscored 2-year-olds in the line-up. Proven A.I. and progeny test bulls are represented (*August JPI in parentheses*), among them Al-Top All American (159), Molly Brook Ginwood Freedom-ET (114), Sil-Mist Montana Buttons Bear (220), ISDK FYN Lemvig (257), Schultz Brook Hallmark (227), AU Lester Topkick-ET (143), Rock Maple Brook Mannix (187), and MVF Lemvig Michael-ET (205). Photo: Julia DeLavergne.

tors in mid-August.

The crossbreds are a kaleidoscope of color, the palette influenced by whether or not one of those 50-50 bulls is somewhere in a cow's background.

"When you have the double F1 cross on the backside of that pedigree," Martin observes, "two generations later, all of a sudden pops out this calf that looks just like a Holstein. I have not seen that when you go with the Jersey sires straight on the top.

"It's only in looks and size. As far as the components, they continue to increase the same way."

There was a bit of trial-and-error along the way, says Martin, but he is certain of this:

"Anyone looking at crossbreeding really needs to be using the very good A.I. sires in the program. No doubt about it.

"One of the most important things that I have come to realize, is that in using the 50-50 cross young sire, I had no information and no way of ever knowing what he was going to be. Once I started getting the A.I. calves out of the crossbreds and sired by the good A.I. bulls, they were so much better than my 'Barnyard Barney' 50-50 bulls."

There was also trial-and-error as the Martins dealt with big and small cows in a rotary milking parlor.

"We had to look at it a lot," Martin recalls. "We had our rotary milking parlor set up for two breeds. When we brought in a string of Holsteins, we opened up the brisket bar and the Holsteins fit fine. When the Jersey cows came in, we pulled the



Herby D. Lutz, manager of Jersey Marketing Service, and Neal Smith, Executive Secretary of the American Jersey Cattle Association, study a few among hundreds of Jersey-sired heifers at M. Curti & Sons, Waukena, Calif.

For this California Operation, Breeding to Jersey Bulls Provides Insurance for Holstein Heifers—and More

At this year's America Dairy Science Association annual meeting, University of Minnesota researchers reported that Holstein cows bred to Jersey bulls, rather than Holstein bulls, produced calves that were 20% lighter at birth, born with less dystocia, and the cows were over 50% less likely to have retained placentas.

All that sounds familiar to the owners and staff at the 5,000-cow operation of M. Curti & Sons, Waukena, Calif.

About five years ago, calving problems and cash outlays of \$2,500 to replace an injured 2-year-old prompted a trial run of breeding 300 virgin non-registered Holstein heifers to Registered Jersey™ bulls. Calving problems disappeared, president Ben Curti told *Western DairyBusiness* magazine in November, 2003. "When you walk through the hospital barn you don't see damaged heifers in there like we used to. Very few, if any."

Today, all but the registered virgin heifers in the Curti operation are bred to top A.I. sires and the economic benefits keep adding up. Heifers freshening with a Jersey-sired calf tend to produce more milk, have fewer days open, and require fewer services per conception compared to those that carry a Holstein calf.

The Jersey-Holstein cross heifers are raised as replacements. They, too, have had "little or no problems" at calving time.

"We had Holsteins calving right next to the crossbreds and about every third Holstein heifer required us to do something to assist in the birth," observed Ben Curti, adding, "Until you actually experience it, you don't know how good calving can be with crosses."

Milk yield of the Curti crossbreds, about 75% of them first-calf heifers and the rest on their second lactation, is the equal of their Holstein contemporaries. Component levels are higher, reaching 4.01% fat and 3.5% protein near the end of a long summer last year. "We are on the cheese yield program with Land O'Lakes and getting a higher premium now—about half of what full Jersey cow premiums would be, but twice as much as the standard (plant) premium."

Curti added, "We've found that the Jersey converts feed more efficiently than our Holsteins. We are still running dry matter intake trials, but on paper we are running about \$1 a day cheaper to feed the crosses."



Ben Curti

brisket bar back and the Jerseys fit fine."

Over the three years it took to convert to the smaller Jerseys, there were as many as 40 of the larger 50-50 cross animals in a string of 150 Jersey cows. "There was no way to set that brisket bar for individual cows as they came in. We finally had to get rid of them."

"Now the 3/4ers are small enough," Martin comments. "They're starting to get closer to the Jersey size where they fit on the rotary." The 7/8ths generation coming into production this year fit just fine.

Why Expansion

There's no question in Norm Martin's mind about the value to him of identifying these animals in the AJCA Jersey Expansion program.

"I realize that there are people who carry a 'title' as being 'registered breeders.' I look at it somewhat differently.

"We register everything. We score every cow. We contribute to Equity. We are on the REAP program."

All of them are "like building blocks" with the first two giving him access to JerseyMate™.

"I use the mating service at Jersey because I don't think that I will ever live long enough to know the Jersey breed the way I knew the Holstein breed. My bull selection leans toward cheese yield. Inbreeding is a real concern. It figures out what bulls we are going to use so that I don't have to worry about it.

"Those are the tools that I use to improve the herd."