

THE PULSE

Winter 2018 • Holstein Association USA, Inc.

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America's Dairyland

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NEW YEAR, BIG GOALS

The winter season brings many challenges and changes. Working with dairy cows seems to take more effort to keep them fed, bedded and milked in weather that is often less than desirable to be outdoors. The new year brings a time of reflection on the past years' successes and failures. That reflection prompts us to develop a plan for success for the upcoming year. Your leadership at the Holstein Association is no different. With the advent of a new year, the board and staff are planning for a successful 2018.

The board met recently in Chicago. We reviewed the Association's activities for 2017 year-to-date, which have been strong. Registrations are about one percent ahead of 2016 and Basic ID's are over 10 percent ahead of the previous year. If the year continues at the same rate, 2017 ID's would total over 700,000 animals which would be a record number. Holstein COMPLETE® participation is growing and continues to provide great value to our members. If you are not on COMPLETE, contact your regional sales representative to see how it will benefit you.

A major emphasis for the board was to approve an updated business plan for 2018. That includes growing our traditional activities such as ID's, Transfers and Classification. A new project approved for 2018 is a research study that will determine how to minimize the effects of inbreeding while maximizing genetic gain through genomics. This project will be paid for by withdrawals from Holstein USA's reserve fund. In 2014, the board approved a policy that allows the Association to use the Reserve Fund to finance special projects that will benefit our members and the breed. This is a one year project and we plan to fund more research proposals each year. We appreciate all of the efforts our Holstein staff does to serve our members and bring new ideas to the board.

For the past two years, CEO Meyer has led the board in a strategic planning discussion we call

"2030 and Beyond." We know that the dairy industry and breeding programs are changing faster than ever before. It is important that the Holstein Association continues to be the leader in information and services that our members need to succeed in the future. One of our biggest priorities is to assure that there is enough data flowing into the system to confirm genetic evaluations.

"With the advent of a new year it brings a time of reflection. The Holstein Association has so many things to be thankful for, including our registrations are about one percent ahead of 2016."

Without new and relevant data input, the accuracy of genomic predictions will suffer. With SET data input in a continuous decline, our members are footing most of the bill for collecting type data. Our goal is to ensure adequate information is collected so U.S. genetic evaluations remain the "Gold Standard" around the world. We want to be the first and primary resource for information about the Holstein breed.

In my last article in *The Pulse*, I mentioned that HAUSA was working to improve the dairy economy. The Legislative

Affairs committee recently met and discussed a number of ways the Association could help. They are prioritizing those ideas and will soon make a plan to help the dairy farmer.

An older Holstein breeder used to say that "dairy farming is like the three-step dance, it's two steps forward and one step back." I sometimes thought it was one step forward and two steps back. I know there are many difficulties in operating a dairy but I really believe a positive attitude is key to being successful.

We have so many things to be thankful for. At the top of the list are the many great friends in the Holstein business. I wish you a very Merry Christmas and a happy, prosperous New Year.



A handwritten signature in dark ink, appearing to read "Boyd".

Boyd Schauffelberger, President, Holstein Association USA, Inc.



The Burmania family (l to r): Abby holding Brooks, Joel, Alexa, Drake and Cade

DREAMS TRANSITIONED INTO REALITIES

As all of us are well aware, it's almost impossible for a young adult to get started in dairy farming on their own. Obviously, the cost of land, buildings, cattle, equipment, etc. generally make it cost-prohibitive. For the most part, if you're not born into a dairy farm family, you'll never dairy on your own.

Land for Good, a New England non-profit organization promoting agriculture, reports, "Aging farmers own a collective \$1.8 billion in farming infrastructure and land throughout Massachusetts." The Keene, New Hampshire based organization, which specializes in farmland access, tenure, and transfer, is concerned about the lack of first-generation farmers able to break into the business, as longtime farm families leave their farming enterprises.

In Massachusetts, of 2,300 farmers older than 65, only eight percent have someone under 45 working with them, according to Land for Good. In the next decade, it's estimated one-third of Massachusetts farmland is expected to change hands, according to findings by American Farmland Trust, Land for Good, and U.S. Census of Agriculture data.

New England has lost more than 10,000 dairy farms in the past 50 years. Today, there are approximately 2,000 remaining dairy farms in New England. Franklin County, Massachusetts, just a short drive from our headquarters at 1 Holstein Place, had over 125 dairy farms 40 years ago, today there are less than 35.

We all have friends or family who have exited the dairy business in recent years, or will in the future. Oftentimes, a dairy herd is sold because there are no family members interested in carrying on the family tradition. In reality, there may be options for you who are considering giving up the regular routine of owning and managing a dairy herd without having your Registered Holsteins® leave the farm.

In this column, I'm going to tell you about some out-of-the box examples that have helped good young people establish their own dairies.

In my travels, I had the privilege of visiting two dairies where retiring dairy farmers who had no family interested in carrying on the family's dairy legacy have created opportunities for bright, passionate, Registered Holstein enthusiasts to get started with their own dairies.

The first example involves Joel Burmania, of Burmania Registered Holsteins in Cambria, Wisconsin. He is dairying on his own in large part due to his own character and makeup; Ken Smits, a retiring dairy farmer who couldn't stand the thought of his farm sitting idle; and a local community banker who trusted both Joel and Ken.



As background, Joel did not grow up on a dairy farm. He lived in the small town of Friesland, Wisconsin, a very short drive from Cambria, where Ken dairied.

Joel started working on another dairy farm when he was 11 years old, and continued to work there and at another area dairy until he came to work for Ken after school and weekends in April of his senior year in high school. When Joel graduated from high school in 1999, he began working full time for Ken on the dairy farm and assisting with the 73-cow herd. Ken had known Joel since he was a young boy, as he lived not far from his farm, and the Smits and Burmanias attended the same church.

Originally, Joel worked for wages as a typical hired man. Ken and his wife, Ellen, have no children, and developed a very close relationship with Joel. In Joel, they saw ambition, energy, and a love of cows, and began to think that he had the potential to one day own their Registered Holstein® dairy herd and farm.

In 2003, when Joel was just 23 years old, Ken made him a partner, and at that point, Joel bought the Smits' 73 cows and the 50-60 head of heifers in the herd. Ken continued doing the crop work and supplying the feed, and Joel handled the dairy operation.

Yes, I know, this is almost an unbelievable story! Joel says, "You know, I think I got kind of lucky. I knew the banker who I borrowed the money from quite well, he knew Ken and the situation at hand, and made me the loan. As crazy as it sounds, I mean, here I am a snot-nosed 23-year-old punk and I got the loan." That's small-town community Wisconsin banking at its finest.

Four years later, at the age of 27, Joel bought the farm buildings from the Smits, began leasing their machinery, and cash rented the farmland. Soon, the buildings will be completely paid for, and Joel will begin the process of buying all of the farmland from Ken.

What was it about Joel that made Ken want to give him this tremendous opportunity? Ken states, "He wasn't afraid of hard work. He just pitched right in, work didn't scare him, and he is very easy to get along with. We get along real good, and I don't think we've ever had a disagreement yet."

I asked Ken for any advice he would give to somebody who might be considering setting up an unconventional dairy herd and farm transfer like this. He said, "I think the first thing is to make sure you can work together and that your personalities won't clash. I think things just happened here, we really didn't plan everything out originally."

Ken continues, "This has been a win-win situation for both of us. If there aren't animals in the buildings, the buildings deteriorate, and the place goes downhill. Joel does a very good job of keeping the place up, we are real proud of this place." Joel and his family live in the nice home Ken and his wife originally built, while the Smits built another beautiful home on a hill overlooking the farm.



Joel Burmania and Ken Smits

"The first thing is to make sure you can work together and that your personalities won't clash."

– Ken Smits –





(l to r) Kelsey and Trent Hendrickson with Dave Erickson

Another inspiring and uplifting story about transferring a dairy farm to a non-family member comes from Dave Erickson and Trent Hendrickson in Blanchardville, Wisconsin. Dave was born in 1949, and eventually became the fourth generation of Ericksons to dairy on the family farm. His father purchased their first Registered Holsteins when Dave and his siblings were old enough to show cattle.

Over time, Dave bought his father out of the farming operation in segments. He first bought half of the machinery, then half the cattle, then all of the cattle, and then all of the machinery. He then rented the farmland, and eventually bought all of it from his dad.

The Ericksons milked cows on this farm for approximately 100 years, and Registered Holsteins are still being milked at the farm; the only thing that's different is the last name of the guy who is milking them. Trent Hendrickson has taken over the dairy operation, and he and his wife, Kelsey, are the proud owners of Trent-Way Holsteins.

Trent grew up on Jeffrey-Way Holsteins owned by his parents, Jeff and Kate Hendrickson in Belleville, Wisconsin, not far from Blanchardville. The Hendricksons have had Registered Holsteins their entire life.

Trent graduated from the University of Wisconsin-Platteville in 2010, at which time he came back to the family farm and helped his parents. Trent started buying some of his own cattle, and his herd grew to about 20 head in a fairly short time.

At the same time, Dave Erickson who has two sons, one a researcher in California, and the other a police officer in Wisconsin, and neither had any interest in dairying. The Ericksons and Hendricksons were acquainted, and Dave learned that Trent might be interested in settling in on his own farm. Trent's interest in branching out coincided with Dave's thoughts of retiring from milking

cows, so Dave placed a call to Trent and told him that he wasn't interested in dairying for many more years, and wondered if he might be interested in dairying on his farm. That first call turned into further conversations, and the two of them came to an agreement that Trent would buy Dave's cattle and potentially the entire farm.

"If I wouldn't have had Dave to help us get started, it would have all been virtually impossible."

– Trent Hendrickson –

Trent was pleased that Dave was interested in the possibility of selling to him. Trent states, "I always admired Dave's farm, we'd come here for dairy judging. I liked how his barn was set up, so when the opportunity arose, I was interested. It was a little overwhelming at the start. I asked myself if this is actually a possibility of something that could really happen? I talked things over with my parents and they thought it made sense, and after that I had a sit-down meeting with Dave and we set up an agreement on how

we would run the operation and I guess we never even had a contract."

Trent is extremely grateful for Dave's willingness to work with him. According to Trent, "It's hard for a young individual to get started because of the cost of everything and just one small thing that breaks down can set you back a long ways when you're getting started. There's not a lot of money to get started because everything is very costly to maintain and repair. If I wouldn't have had Dave to help us get started, it would have all been virtually impossible. Dave did the crop farming, and owned and maintained the farm equipment."

Trent indicates, "Basically all my wife, Kelsey, and I had was the 20 head from my parents to start off and I thank my parents for providing me with such good cows and being able to finance through them." The cows Trent and Kelsey were able to purchase from his parents, and the facilities and feed arrangements they arranged with Dave got them off to a good start.

In this situation, Trent managed the dairy operation, while Dave did the cropping and provided the equipment, field work, and continued to help out some on the dairy. They agreed on how the milk check would be divided. Dave provided all the feed, except for the protein mix, which Trent and Kelsey paid for, and all expenses related to the cows, in terms of veterinarian expenses and supplies, etc. came out of the Hendrickses' budget.

Trent states, "Dave put in a lot of hours, I learned a lot from him. He was a mentor to me, we worked side-by-side, and you know, I was young, just a couple of years out of college, and I hadn't seen everything. Until you're doing it, you don't realize all the things that Mom and Dad did at their place. So, Dave acted like a father figure to me, he was right beside me, mentoring me on how he did things, and it was really cool that we had his support. He showed me a lot of things, and taught me a lot of things I didn't know."

Dave comments, "Trent and Kelsey didn't need any mentoring on the cattle business because they both knew their cattle. So, it wasn't like you were bringing on someone who really doesn't know cattle. I've always felt that it's their cows, it's theirs to run."

I asked Dave, Trent, and Kelsey how complicated it was to work out this arrangement. Dave pointed out, "The financial advisors said that each of you guys have to go to your lawyers, and draw something up, and I held out my hand and said, 'this is my attorney on my side'. Now I wouldn't have done that with somebody I didn't know. There's a difference there. You know the ability and you know the person, so it wasn't that hard."

Kelsey and Trent are now renting Dave's land, and Kelsey works off the farm in dairy sales. Dave is just over the hill from the farm on a house that his folks first built when he took over the farm. Dave says, "I'm in close proximity but I wanted this to stay in farming, and in particular dairy farming because the facilities were already here and, you know, I still like cows."

The Trent-Way herd excels in both type and production. You can find out more about their outstanding herd on their website www.facebook.com/trentwaygenetics.

This transition has worked out wonderfully for Dave and the Hendrickses. According to Dave, "The biggest

thing that I had heard from people that had rented or sold their cows is that it's really a tough adjustment for them, because they end up with an empty barn, and all of a sudden they don't know what to do with all of their time. So, with me continuing to work some on the farm, it made it easy for me. I've transitioned from working way more hours than I should to now where I don't really do any regular chores. I help with different things, but I don't have a regular schedule or anything. I just can't sit, I've got to be doing something, and this allows me to do that. So, it's made the transition for me a lot easier."

Dave has moved to his parents' old house right near the farm, and the Hendrickses live in his former house.

As you can see, the arrangements the four families made have worked out very well for all parties. Each of them exemplify how successful things can be when good people get together, work together, and think positively about the possibilities.

If any of you are considering retiring from dairying, I encourage you to think about what the Smits and Ericksons did for the Burmanias and Hendrickses. While their arrangements may be considered unconventional, they're highly successful.

In some cases, the retiring dairyman might be interested in leasing to someone interested in getting started in dairying. Lease agreements can give young dairy enthusiasts a chance to break into the business. Lease agreements of all kinds need to be flexible to suit both new and older dairy farmers. Leases can also lead to outright purchases.

Currently, I know of several situations where people are considering selling their cows, because they're aging and have no family interested in taking over the family farm. If you're a younger reader looking for a chance to get started on a dairy, just let me know. Perhaps you can get started with your own dairy just like the Burmanias and Hendrickses did!

Happy New Year!



John M. Meyer, Chief Executive Officer, Holstein Association USA, Inc.





Rick Adams, Sugar Creek Dairy LLC

RETURN ON INVESTMENT

For Rick Adams, Registered Holsteins® provide greater opportunity and more added value.

Rick Adams' marketing strategy for Registered Holstein® cattle is simple: believe in what you sell.

The Elkhorn, Wis., dairyman and wife Marleen have built Sugar Creek Dairy LLC based on that philosophy — and the integrity of their herd data.

It's a fundamental belief that has helped them sell more females in addition to placing bulls in A.I. lineups.

A strong foundation

Rick's story began when his father moved to Lake Geneva, Wis., in 1952. From there, the diversified farm grew to 50 cows, in addition to more than 1,000 pigs and 100 steers. Growing up on the farm offered lessons

in consistency and attention to detail, he says.

"The more things you took care of, the better the cows did," states Rick.

He still follows that adage today, but using a more modern version: if you can't measure it, you can't manage it. The dairy herd started in a stanchion barn and progressed to a tie stall barn. With a little more time and funds, they remodeled their calf facility.

As soon as Rick was old enough, he took over the dairy herd, managing it with his brother.

"I always stayed in the dairy barn," he says. "That was my deal. I'd help with the crops, planting and harvesting. I did all the hay with my brother and our wives."



Establishing the dairy

In 1997, Rick formed a partnership with another dairyman to build Sugar Creek Dairy with 450 grade cows. Today, Sugar Creek Dairy has 630 cows and 570 heifers — all of which are Registered Holsteins.

"I only had 40 Registered Holsteins when I left Lake Geneva," Rick says. "After the expansion, we started registering all the calves as they were born. We started grading them up in 1999, and that's how we got started."

Breeding up Holsteins from grade status to registered pays dividends in the long run, he says.

"Grade cattle are fine, but you're not going to improve from year to year," explains Rick. "You can't sell more milk than last year unless you're making genetic progress, and that's where Registered Holsteins come in."

Sugar Creek Dairy also started using the Holstein Association USA's Tag ID system, which Rick credits with helping the operation simplify animal identification.

"We're able to identify the calf correctly at birth, and no doubt about it," Rick says. "That's just helped us move forward and makes it not an issue."

Get them registered

Rick also emphasizes the importance of registering Holsteins right away.

"Once you document it and get it right, there are very few errors that happen for the rest of the calf's life."

He credits the Holstein Association USA in helping Sugar Creek Dairy in many ways, one of which is consistency of information.

"Recording information from generation to generation is the only way you can track improvement, whether it's type or production," he adds. "If you're going to make progress, it has to be documented, and it's the best way I know how. It's just really straightforward to me."

Raising Registered Holsteins has made a significant improvement to Sugar Creek Dairy's bottom line, according to Rick, due to the merchandising opportunities for his genetics.

"We've had some bulls go to A.I.," he says. "We've bought embryos and got some terrific cow families involved in our herd that we didn't previously have."

Rick says he's always looking to add high quality genetics to their herd in a way that's as economical as possible.

"I don't like to spend a lot of money doing it, so I'm very careful when I do that," he says. "I'm going to get a return on my investment."

For Rick, having that registration paper is very important.

"I can sell them with confidence that they are who I said they are, and the performance is documented," he says. "There's just no other way to do it."

Raising Registered Holsteins has paid off for Sugar Creek Dairy.

Holstein Association USA recognized the operation as one of the 2017 Herds of Excellence at the 2017 National Holstein Convention in Bellevue, Wash.

"Recording information from generation to generation is the only way you can track improvement, whether it's type or production. If you're going to make progress, it has to be documented."

– Rick Adams –

Cow health, cow comfort

"We don't really lose calves," Rick says. "If they're born alive, we keep them alive. Death loss is very, very, very low. That's very important to us on our farm."

Focusing on cow comfort and keeping animals healthy keeps him busy.

"That's why our barns are always full," notes Rick.

Nutrition is also something Sugar Creek Dairy focuses on. He works with the operation's nutritionist to make sure the cows are getting the proper care and feed.

"He brings ideas to the dairy, and I challenge him from time to time," he says. "We try to feed the highest quality feed that we can with the best ingredients."

Rick boasts that the cows never see a bad mix of feed: "That's part of our success," he says. "The cows are never challenged health wise. If we can prevent it, we will."

Rick adds that animal health is critical to the well-being of their business. It's the complete package.

"We can't survive if the cows aren't healthy," he says. "The reward for the work we do is huge. We produce milk, meat and calves. It's very important — we wouldn't do anything against the well-being of the cow. Registered Holstein producers are committed to the health of their cattle."





A BALANCED PERSPECTIVE

Mitch Breunig and Mystic Valley Dairy depend on Registered Holsteins® for their success.



Mitch Breunig, Mystic Valley Dairy



Lauren Breunig



Mitch Breunig possesses a quiet and unassuming nature, and as he makes his way through the barns, his cows hardly notice his presence.

His farm — Mystic Valley Dairy of Sauk City, Wis. — is nestled in a valley surrounded by rolling hills. It first appeared on the radar of global dairy producers when it produced the famed bull Toystory.

Before the bull's death in 2015, the A.I. sire would produce more than 500,000 calves in 50 countries — making him one of the greatest bulls of any breed in the world.

But it's not just the genetic contribution that his cow herd has made over the years that matters most to Mitch. Ultimately, dairying is about producing the best food in the world with the best cattle in the business — and doing it with family.

"I want to raise good cattle, cattle that balance type with production," states Mitch. "But I never want to lose sight as to why we're doing this."

Small start, healthy growth

Mystic Valley Dairy, a 2017 Herd of Excellence Award winner, is owned and operated by Mitch, whose parents started the dairy in 1961 with 40 cows. The Breunigs expanded the dairy in 1966, adding a new barn with 52 stalls. Another expansion in the 1980s doubled the herd.

After college, Mitch returned to the dairy, and the family operation grew to 400 cows six years later. Today, they also have 450 dry cows and 540 young stock, all Registered Holsteins®.

Cows are milked 3X/day with two shifts of employees. Mystic Valley Dairy has 1,050 acres and grows their own crops, including alfalfa, corn silage, corn, wheat and soybeans.

Breeding philosophy

"We try to use the best genetics available," Mitch says. "We're breeding for a complete cow. We want a cow that looks good and produces a lot of high component milk with a low somatic cell count."

Mitch adds that they also focus on quality, with attention toward udders, feet and legs, feed efficiency and health traits.

"We want a cow that's easy to breed, easy to calve, and is low maintenance with high output," Mitch says.

The Breunigs utilize Holstein Association USA's classification program and sire summaries to make the best breeding decisions. They also use genomic predictions to determine where their animals fit in with other Holsteins.

"We use that information to figure out which animals we need to be selecting to generate more offspring," he adds.

Mystic Valley Dairy also uses the Holstein Tag ID

program for permanent identification: "We can trace that animal all over the world," Mitch says. "If she would happen to leave our farm, we can always trace that cow back to our farm."

Breunig credits the Holstein Association with helping Mystic Valley Dairy achieve success.

"When you're selecting for genetics based on data, you need data that's managed well and from an organization with a lot of integrity," explains Mitch. "I think the Holstein Association does a really good job of summarizing and managing that data in an unbiased way to give us the very best information that we can use on the farm."

Utilizing data and making better decisions helps Mitch be a very progressive dairyman, always pushing to improve.

"We're always trying to find what works best for us and what's working," he says. "If we find something that's not working, hopefully we can make an adjustment so we can improve the output we're getting."

More than a competition

In addition to producing top-flight cattle that are relevant to the worldwide dairy industry, showing is a family tradition Mitch holds dear to his heart. His three children, Allison, Lauren and Brayden, have all been active in showing competition, and have experienced valuable lessons along the way.

Lauren enjoys participating in dairy showmanship and spends hours practicing for the elite competition at the Wisconsin State Fair.

"She really likes the competition of showmanship and being able to take that calf that has never gone to a show and work with it, and understand how to show her off in the very best way," beams Mitch.

The Wisconsin State Fair won't be Lauren's first dairy showmanship competition, having competed at the 2016 World Dairy Expo showmanship contest.

"There's so many good kids across the country, and the competition is really deep," Mitch says. "You've got to win gracefully and humbly, and when you lose, not to carry on and make a fuss. You've got to accept that somebody else won the day and some day they will come congratulate you when you have a good day."

Breunig reiterates it's important to know how to carry yourself in the showing — as it is in daily dairy life — no matter what the outcome. With Registered Holsteins, every day there's an opportunity to raise one of the greatest bulls in history — or to help your kids learn life's lessons on a daily basis.

"We want to keep improving our dairy herd, making the kind of cow that is desirable not only for our neighbors to buy, but for people around the world," Mitch says. "And continue to provide the opportunity for my kids to come back to the farm."



SAY CHEESE

A Wisconsin family legacy and leading cheese brand depend exclusively on Registered Holsteins®.

Among the green fields of Waterloo, Wis., beneath the shade of its freestall barns, Registered Holsteins® at Crave Brothers Farm quietly help feed the world.

The air is cool. The sun is bright. And everything seems at ease here.

“Our number one priority is cow health and comfort,” explains Patrick Crave, a member of the family’s newest generation to work on the farm. “We produce milk and cheese with a sense of stewardship to the environment and care for our cattle.”

Four brothers, Mark, George, Thomas and Charles, began the operation in 1978, relocating to Waterloo. Today, the company is a vertically integrated operation with more than 3,200 head of Registered Holsteins and a modern cheese plant that produces several award-winning cheeses.

This farm-to-table focus has enabled the farm to add value to its production, and build a growing list of premium clients because of their reputation for quality. For instance, the dairy is a key supplier to Whole Foods Market, one of the nation’s largest and most influential retailers. Other customers include Pike’s Place in Seattle and Dekalb Farmer’s Market in Atlanta.

You won’t find a brown cow on the farm, however.

Exclusively Holstein

Years ago, the brothers chose to raise solely Registered Holsteins. They did so because it made business sense

— and it still does today.

For instance, according to 2015 data from the National Dairy Herd Information Association, which included nearly 12,000 herds nationwide, Holsteins not only produced significantly more pounds of milk, but also more total pounds of fat and protein than all other U.S. dairy breeds. All of these things are key to successful cheese production. The data also showed the breed had a lower somatic cell score than all other dairy breeds.

This and other research consistently shows that, although milk price is determined in part by the percentage of each component, it is the total volume of milk components sold each month that results in higher levels of gross revenue.

In other words, while some breeds produced a higher percentage of fat and protein, Registered Holsteins produce significantly more pounds of all economically relevant components.

And when you’re in the cheese business, that’s a critical distinction.

“The Holstein cow is really a cash machine,” says Mark Crave, the farm’s herd manager. “The Holstein Association uses a slogan of ‘more profit,’ and it really is the case. Nothing I know of in animal agriculture comes close to a Holstein cow for generating revenue.

These Registered Holstein cows pay for a lot of stuff. They pay for our families’ livelihoods, for tuitions, orthodontists, music lessons. Everything.”

Reliable data, reliable product

A second part of reliable cheese and milk production is ensuring reliable genetics and a dependable genetic evaluation. That's why Crave Brothers Farm registers its cattle with Holstein Association USA® and makes extensive use of the organization's genetic-improvement programs.

"The Holstein Association's registry keeps you plugged into the information about the breed, the latest progress behind it," Mark says. "We're along for the ride, connected to the best breeders in the country and the Holstein Association's latest genetic progress. So, as the breed progresses, our cows benefit and we progress, as well."

Adds Patrick: "Without the Holstein Association, we wouldn't be as progressive as we are. It contributes to our cows' health and productivity."

Looking forward, Crave Brothers Farm provides a blueprint for modern agriculture when it comes to family-owned farms building a brighter future by focusing on genetic selection to produce the highest-quality food possible. The farm's products touch consumers across the nation.

"You never know where you're going to find it next," Mark notes. "For example, we'll get a text from New York City saying, 'Hey, I saw your product. Where can I find it here?' You know, that's pretty cool."

Community approach

Not only have the Crave Brothers made contributions to the country, their dairy farm contributes to the local economy of Waterloo, too.

"A dairy farm in any local community is a great asset," Mark explains. "About 80-90% of our expenses are spent within 50 miles from here. Feed accounts for 40% of our expenses. Of course, that's very local. From machinery to building materials too, we're happy to contribute revenue to the local economy."

The Crave Brothers business model and quest for quality products begins with priceless data provided through the Holstein Association. The genetic evaluation generated there informs dairy farmers across the nation as they select genetics best suited to their individual herds. This information translates to improvements in progress, profit and health at the Crave's farm — all in an environmentally-sound manner.

The farm operates a methane digester that generates more than twice as much electricity as the operation uses each day, enough power for the dairy and cheese plant. It also practices water conservation and recycling. Mark notes these are sustainable practices important to consumers and the long-term viability of the farm.

It's a story worth sharing.

"We in the dairy industry need to share what modern agriculture is really about, because our message has been lost over time," Mark says. "We assume people know how well we take care of our cows and the land. But a lot of the pressure we get from consumers is because we haven't shared our message with them."

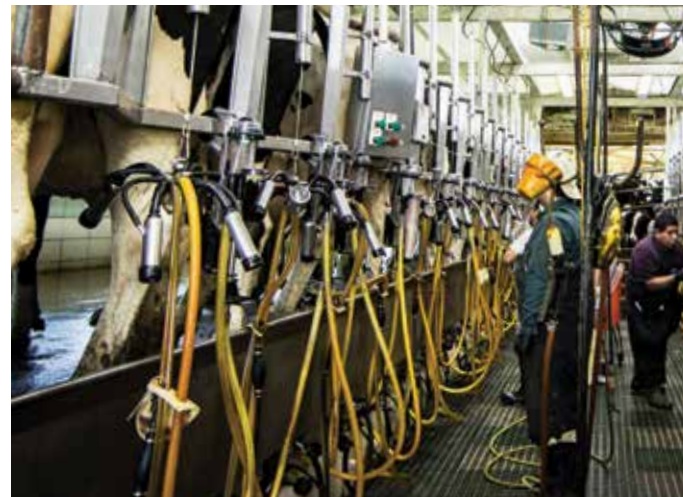
Caring for the cattle means using the Association's genetic evaluation to gain insight on which animals can help to improve milk production and efficiency, while Crave Brothers provides a safe and comfortable environment to ensure their cows reach their genetic potential.

"Consumers have a right to know where their food comes from. I appreciate that, because I do this every day," Mark says. "In other words, we take care of these cows, and they take care of us."



Mark Crave, Crave Brothers Farm

"The Holstein cow is really a cash machine. Nothing in animal agriculture comes close to a Holstein cow for generating revenue."





Kimberly Keller

TRUE STEWARDS



Mark Keller, Kellercrest Registered Holsteins, Inc.

"Something special." These are the words of Tim Keller of Kellercrest Registered Holsteins, Inc., a family owned and operated dairy farm near Mount Horeb, Wis. In 1968, Tim's parents, Daniel and Jeanne, set the wheels in motion with only two Registered Holstein® cows.

Today, the operation has grown tremendously to 600 head. Around 300 females comprise the milking herd, producing an average of 31,658 pounds of high-quality milk. More importantly, the herd is 100 percent registered with Holstein Association USA®.

"When they married, our parents had a vision," Tim says. "They instilled the values of Registered Holstein cattle into us. Because of the registry, we've found better ways to weather the storms."

By registering cattle with the Holstein Association USA, Tim is provided an awareness on genetic selection that was previously unattainable.

"The only way to continue, to move forward with our philosophy is by improved genetics, having the best animal we can," says Mark Keller, Tim's brother. "One of the many benefits of being registered with the Association is MultiMate™. By using the Association's MultiMate program, we can plug in the bulls we want to use. We can coordinate it to fit our family's philosophy."

For more than 17 years, Kellercrest Registered Holsteins has maintained an admirable philosophy, too. Milk production, components, indexes, longevity and showing all play a part. It is a philosophy which, as Mark puts it, leads to dairy cows of "sound feet and legs — and good udders."

Above all, it yields healthy, comfortable cows.

"We've never shied away from spending the money on the next step, or the technology that'll make our cows more comfortable. It boils down to that," Mark says. "Healthy cows make good milk. Clean, high-quality milk. And that's what we produce for consumers."

The public eye

Kellercrest Registered Holsteins has never avoided consumer attention or questions, either. Rather, they aspire to increasing consumer awareness of how they treat their animals. Their methods, like other Holstein breeders, are more comfort-driven, more efficient and environmentally sustainable than ever before.

"There's a lot of stereotypes out there about what we do. People read things or see things on the internet, and it's just not true," acknowledges Tim. "I would tell consumers that the most important thing for us is taking care of our cattle. I would show them how we do it and why, and have them ask questions. Nothing would be off limits."

"Registering with the Holstein Association has opened up the world to us."

— Tim Keller —



The Kellers live up to their word, providing educational tours of their facility whenever requested.

"We do quite a few tours on this farm, even with people who've never been on a farm," Mark says. "We also work closely with the Wisconsin Milk Marketing Board, milk store managers, and VPs of multi-billion dollar companies. Our message to all of them is this: care goes into these animals. The better we treat our animals, the better they treat us."

The path forward: Genetic progress

It hasn't always been easy for the Kellers. Like any farm, they have put hard, dignified work into their operation. They've also had their fair share of trials.

"Like most dairy farmers, we've had our highs and lows," Tim says. "It was because of our lows that we chose to expand. We were a very traditional Wisconsin farm at first. But we put pencil to paper and figured out how to evolve."

In 2000, Tim and Mark purchased the farm from their parents, and they started on the dairy's expansion. Since then, success continued to find them. One of the primary aspects that maintained their optimism, helping them see the way forward, was raising Registered Holsteins.

"It's amazing how cattle bring people together," Tim says. "Registering with the Holstein Association has opened up the world to us. The people we've met through registering have been incredible."

Through the Association, the Kellers have access to information regarding the breed's latest genetics. They can pick and choose from superior bulls, applying their genetics to their own herd. They can form connections with other breeders and dairy producers they wouldn't have otherwise.

"We can sell our embryos throughout the world now, so our name remains relevant. When people buy a Kellercrest animal, it makes me happy," Tim explains. "Japan, Germany, we've sold embryos to Australia — and it's all because of the registered cow. It makes you feel proud when someone is doing just as well, if not better than you, with an animal you bred."

Holstein Association USA continues to help operations like Kellercrest Registered Holsteins stay successful in a world challenged by changing perceptions and uncertain markets. Without registering their animals, families like the Kellers would not be where they are today.

"Sometimes, we'll stand out here in the freestall barn and we'll listen," Mark adds. "I'll ask the people with me, 'Do you hear any animals?' It's quiet. We don't hear any noise. All you see are animals laying around, chewing their cud. Quiet animals are content. It means they're taken care of."



CASTING A WIDE “GENETIC NET”

BY HOLSTEIN STAFF

Every time a sperm and egg cell unite, there are millions of potential genetic combinations that are possible from that single pairing. A calf might inherit a more favorable set of genes from its parents, the average of what we might expect it to inherit, or they might lose out and inherit a poorer set of genes than we would have hoped. With genomic testing, breeders can get an idea earlier than ever before as to what that calf inherited and how they might contribute to the next generation of your herd.

In some herds a common misconception has come up that breeders feel only a small percentage of their herd is worth investing in by building pedigrees through registration, and value-added services like classification and production testing programs. Herds who are choosing to only work with a top percentage of their animals are likely missing out on a great deal of opportunities. Only working with the most elite animals will likely not allow a herd to realize the full genetic potential that exists. Of course, the quality that exists throughout a herd is individual and will differ from farm to farm, but the key message remains the same – to maximize genetic improvement in a herd, it is important

to be sure a large enough group of animals is being worked with to capture that full value and allow the opportunity for outliers to be created.

Depending on a herd's breeding strategy, size, use of reproductive technologies (such as ET and IVF), marketing opportunities and overall goals, registering 25 to 100 percent of a herd is going to maximize return on investment. A key factor for building value is to build pedigrees over generations, not waiting until an elite offspring is created and then trying to create a full and attractive pedigree overnight.

The herds who will have the most success are those who take that proactive approach to a breeding program. They are registering all of their animals, fully participating in classification programs, and on official production records testing to create complete and robust pedigrees on the majority of their animals. These herds are treating their cows as if any of them could be the next dam of their best heifer or two-year-old, and using the best bulls across the herd. To accelerate genetic progress further, top herds are strategically using advanced reproductive technologies such as sexed semen, ET and IVF to ensure that they are getting

heifers from their best cows. Herds are creating more offspring from their better animals. They are utilizing animals that are unlikely to advance the genetics of their herd to be recipients for calves with a higher genetic merit than they can produce. Remembering the millions of genetic combinations possible each time a cow and bull are mated, ET and IVF can maximize the chance of creating outliers by creating many combinations of one mating. This proactive strategy, working to build pedigrees on all animals in the herd equally, is effective no matter what a herd's individual breeding goals are.

Another misconception is that the highest genetic merit calves will only be made from the breed's most extreme elite females. The reality is that, while these animals were bred to be great, most of the highest animals inherited a better than expected set of genetics from their parents. Just one example of this is the popular young sire Bacon-Hill Pety Modesty. Modesty has an elite TPI of 2838, but as of the August 2017 genetic evaluation, both his sire and dam have TPI values under 2500. His dam's TPI qualifies in the top 1% of the available cow population, and his sire's TPI is in the top 20% of the available proven bull population. Modesty is also a genetic outlier amongst his siblings – he has three full sibling flushmates with TPIs ranging from 2422 to 2539. In the field, there are many stories of calves who have deviated well over 300 TPI points over parent average; if the owner of those animals was not working with a large spectrum of their herd, that calf might not have the

information behind it to realize its true marketing value, or even been created in the first place.

Taking a proactive approach to your herd's improvement and marketing program saves time and peace of mind while giving you the best chance for maximum return on investment. Genomic testing is a powerful tool, but it is not equivalent to buying a lottery ticket. Looking at the top two highest selling calves from some prominent

Holstein sales this year, the National Holstein Convention Sale and the World Classic, we see that those animals bringing top dollar did win the "genetic lottery." Inheriting a much better than expected set of genes from their parents, all close to 100 points over their parent average TPI values, they also came from strong cow families with several generations of classified granddams with admirable milk production.

The bottom line – your \$10 investment to register an animal,

plus fees for classification and production records testing can pay large dividends over time. Participation in programs such as Holstein COMPLETE® makes it simple and very cost effective to be sure you are taking full advantage of Holstein programs to capitalize fully on your investment when the time arises. If you would like help developing a direction and plan for the future of your breeding program, contact your Holstein USA regional sales representative today. Our regional sales representatives are happy to work with you to help you get started.

A key factor for building value is to build pedigrees over generations, not waiting until an elite offspring is created and then trying to create a full and attractive pedigree overnight.

FIND HER GENETIC POTENTIAL

GENOMIC TEST	STANDARD PRICING	ENLIGHT USERS	HOLSTEIN COMPLETE® + ENLIGHT USERS
CLARIFIDE® Low-Density SNP Test	\$46	\$42.50	\$39.50
CLARIFIDE Plus® Low-Density SNP Test + Dairy Wellness Traits & Official Polled Test	Must be an Enlight user to order	\$48	\$44
CLARIFIDE Ultra Plus® High-Density SNP Test + Dairy Wellness Traits & Official Polled Test	Must be an Enlight user to order	\$86	\$79

ADDITIONAL GENETIC TESTING

OFFICIAL GENETIC CONDITIONS	ORDERED WITH GENOMICS (ENLIGHT USERS)	ORDERED SEPARATE FROM GENOMICS
Beta Casein A2	\$12	\$22
Brachyspina	\$20	\$45
Coat Color	Included	\$25
CVM	\$30	\$40
Polled/Horned	\$30 (FREE with CLARIFIDE Plus)	\$50

GENOMIC TESTING OPTIONS

Genomic testing with CLARIFIDE® provides free access to the Enlight® genetic management tool—a one stop shop to officially identify your Registered Holsteins®, order genomic testing, view your results, and analyze the genetics of your herd.



FOUR CONVENIENT WAYS TO ORDER:

- Call us at 800.952.5200
- Email genomics@holstein.com
- Order directly through Enlight® at www.enlight.com
- Order at the time of ID with our EASYID software

Holstein Association USA uses laboratories for genotyping that follow the recommendations of the International Society for Animal Genetics.