HE PULSE

Fall 2018 • Holstein Association USA, Inc.

PUTTING DOWN ROOTS

A Vermont couple returns to the family farm

INSIDE

Holsteins — truly the breed for every need

Using Enlight® as an on-farm tool



THE WORLD'S PERFECT COW



TIMES LIKE THESE

"In times like these it helps

to recall there have always

been times like these."

t the 1978 National FFA Convention, Paul Harvey first delivered his speech, "So God Made a Farmer." This speech gained national notoriety during the 2013 Super Bowl where it was featured in a Dodge Ram truck commercial. His message of the dedication and care of the American Farmer is a worthy tribute to all of those engaged in agriculture. Recently, on the 100th anniversary of Paul Harvey's birth, I heard another quote from him that seems relevant to today; "In times like these it helps to recall there have always been times like these." The dairy industry is certainly struggling in difficult times.

The Holstein Association has been working to get the Dairy Pride Act passed and enforced by FDA. An update was given to the delegates at the National Convention in Michigan. A comment period was extended by FDA to October 11, and we will wait for their ruling. We are optimistic that FDA will rule to prevent plant products to be labeled

as "milk." Your Holstein board and staff will monitor this situation closely and we believe this would increase milk consumption.

On August 13, Director Pete Dueppengiesser, chair of the Legislative Affairs Committee, represented Holstein at an industry meeting in Albany, N.Y. looking for solutions for the dairy crisis. Groups from California and Wisconsin presented plans on supply management. One proposal looked very similar to HAUSA's Dairy Price Stabilization Program developed in 2009. Pete spoke on our emphasis to address the issue of milk labeling.

This past summer I had the opportunity to observe, exhibit and even judge a few shows in Illinois and Pennsylvania. While numbers of cows in general might be down, some shows like the Illinois State Fair Junior Dairy Show had increased numbers. The quality of the animals continues to improve and most impressive was the excitement of the young exhibitors. I am continually inspired by the energy and enthusiasm our youth have for the Holstein cow and dairy industry. Our challenge as adults is to help them find opportunities to succeed.

I am convinced that Registered Holsteins® provide the best opportunity to succeed in the dairy industry today. Our field staff continue to add new herds. In a recent visit with a neighbor, he shared his excitement that he had bred a national sale caliber animal that hopefully will bring a premium. Top quality show

-Paul Harvey

levels. Holstein breeders continue

edition of Holstein America which aired on RFD-TV on August 9. It featured Holstein breeders from across America and if you haven't seen it you can watch it on the

Holstein website or YouTube channel. A highlight of that program

prospects are also in demand. Numbers for registered and Basic ID animals are very close to 2017 year-to-date to see value in Holstein genetics. Many of you have seen the latest

was a segment on Charlie Hamilton from Cuba City, Wisconsin. He is a 2018 graduate of UW-Madison who chose to return to the family farm. Charlie knows there will be challenges on a small family farm but his love for working with the Registered Holstein® cow gives him the determination to succeed.

These are definitely tough times but as Paul Harvey said, "In times like these it helps to recall there have always been times like these." Your Holstein board and staff will continue to look for opportunities to add value for our members. The risks and rewards of a dairy farmer are not like any other occupation but there are many young folks like Charlie Hamilton who have accepted those terms and, I believe, will find a way to succeed. The World's Perfect Cow, U.S. Registered Holstein®, will lead our way into the future.

As always, please feel free to call me or one of your directors anytime.







JUST THE FACTS

Holsteins - truly the breed for every need

Hat's off to U.S. Holstein breeders!

You deserve accolades for the constant, never-ending improvement of the Holstein breed.

The Holstein breed continues to grow in popularity, and the Holstein cow improves by the day. In this column, I will review some of the facts that make Holsteins the most popular dairy breed.

Fertility

Did you know that Holstein heifers have the highest conception rate of any dairy breed? As you can see from the chart, Holstein heifers lead all other breeds in fertility.

Heifer Conception Rate Average PTA for Females Born in 2017					
Holstein	1.04				
Jersey	0.75				
Guernsey	-0.04				
Brown Swiss	-0.06				
Milking Shorthorn	-0.06				
Ayrshire	-0.19				

Source: CDCB

of the cow's udder. High somatic cell count milk reduces flavor and shelf life, and there is nothing the dairy processor can do to improve it.

Holsteins have the lowest somatic cell count at 2.32, and the breed with the highest SCC averages 2.96. No other breed can match Holsteins' low somatic cell count.



More pounds of milk, fat, and protein

Holsteins have long been the leader for superior production of high quality milk, butterfat, and protein. Our wonderful Black and White cow gives you more of everything you're paid for!

Lowest somatic cell score (SCC)

Somatic Cell Score for Birth Year 2014	
Holstein	2.32
Ayrshire	2.43
Brown Swiss	2.53
Milking Shorthorn	2.82
Guernsey	2.94
Jersey	2.96

Source: CDCB

Mastitis can rob a dairy farm of more profit than anything else in a herd. Furthermore, in order to increase consumption of milk, and other dairy products, milk has to be of the highest quality coming out

Comparison Between Holsteins & Other Breeds on DHIA Testing Programs, 2017							
# Herds	Milk lbs	Fat lbs	Protein lbs				
12,616	27,441	1,037	845				
138	22,657	919	756				
818	20,894	1,007	763				
60	19,254	753	606				
23	18,913	714	587				
78	17,806	802	592				
	grams, 201 # Herds 12,616 138 818 60 23	# Herds Milk lbs 12,616 27,441 138 22,657 818 20,894 60 19,254 23 18,913	# Herds Milk lbs Fat lbs 12,616 27,441 1,037 138 22,657 919 818 20,894 1,007 60 19,254 753 23 18,913 714				

Source: CDCB, 2017 Averages of DHI cow herds by breed and test-plan category,

Cows Calving in 2016



Cheese yield

If your milk is being sold for cheese, Holsteins are the key. According to the August 2018 CDCB genetic evaluation, Holstein is the only breed that has any bulls available with a cheese merit dollar (CM\$) index of 787 CM\$ or higher. As a matter of fact, with Holsteins, you have a choice of 1,091 Holstein bulls with Cheese Merit Dollar Indexes ranging from 787 to 1121 CM\$.

The Cheese Yield Chart reveals there are 50 Holstein bulls with CM\$ at 1.000 or over and 100 bulls over 974! The Holstein breed offers you a much broader choice of bulls to choose from than any other breed.

NAAB	Name	CM\$
551HO03529	CHARL	1121
29HO18906	BILLY	1108
11HO12157	ALTALAWSON	1108
29HO18693	CRIMSON	1094
551HO03600	NASHVILLE	1091
29HO18296	ACHIEVER	1074
29HO18697	SASSAFRAS	1068
29HO18812	ADVISOR	1066
11HO12174	ALTAEXPLOSION	1066
29HO18823	BRAVE	1060
29HO18611	SKYWALKER	1054
551HO03637	WATSON	1052
11HO12286	ALTAROBERT	1052
507HO14194	MOOLA	1050
29HO18772	ATRIUM	1048
551HO03590	DEDICATE	1047
614HO14085	SOLUTION	1041
29HO18794	ACCOLADE	1040
29HO18708	KENOBI	1039
29HO18843	PERK	1039
507HO14125	HUEY	1035
29HO18740	NIKO	1030
11HO12219	ALTAZAREK	1028
551HO03674	SHOOTER	1023
29HO18817	HAYWARD	1019
551HO03418	DYNASTY	1016
7HO14333	FUTURE	1016
551HO03713	NORTON	1016
1HO13489	PRINGLE	1015
551HO03638	ROCCO	1015
551HO03684	ROCKFORD	1015
551HO03669	STELLAR	1013
11HO12342	ALTACURRY	1012
29HO18822	AMAZON MEDLEY	1011
29HO18343 1HO13404	SAMSUNG	1011
29HO18799	GLITZ	1010
526HO00047	NO-PE ZIKMUND	1010
29HO18787	ESCALATE	1009
551HO03660	SHYGUY	1003
29HO18818	POWE	1008
11HO12161	ALTAAROLDIS	1008
11HO12159	ALTALIAISON	1008
29HO18954	AFFECTIVE	1008
29HO18860	VIRTUE	1007
551HO03663	JONES	1007
200HO10959	MARIUS	1003
11HO12168	ALTAGILMORE	1004
708HO01101	TOM	1004
29HO18790	DURABLE	1000
	- Albert	

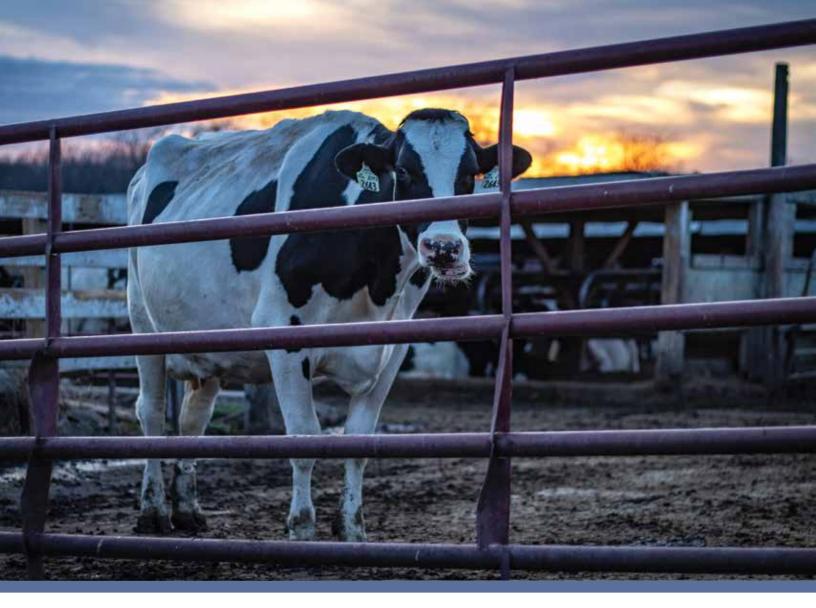
NAAB	Name	CM\$
200HO10955	POSITIVE	999
29HO18208	SPECTRE	999
11HO12240	ALTAMILESTONE	997
515HO00325	ARISTOCRAT	997
29HO18724	ZEBEDEE	996
551HO03657	SHAO	994
29HO17553	JOSUPER	994
11HO12311	ALTAGLO	993
551HO03717	MENACE	993
551HO03711	GALILEO	992
29HO18723	MAJESTIC	992
551HO03716	HOWL	991
566HO01301	KINGSTON	990
11HO12285	ALTANIXIE	990
29HO18782	HUGHES	989
1HO13818	MAPQUEST	989
7HO13504	JAGUAR	989
526HO00049	NO-PE ZEKON	987
29HO18855	PLAZA	987
29HO18778	JACKPOT	987
551HO03415	DELTA-WORTH	987
551HO03722	PONCHO	986
11HO12165	ALTABUGGY	986
29HO18753	SANJAY	985
29HO18801	ARTISAN	985
29HO18808	LUXOR	985
29HO18773	ARCHER	985
151HO00681	RUBICON	984
29HO18682	COLORADO	982
11HO12250	ALTASPORT	982
542HO00776	MERCURY	982
734HO00091	YOLO	982
29HO18545	YODA	981
29HO18634	TORQUE	981
551HO03643	WALLABY	980
551HO03476	FARLO	980
551HO03416	DYNAMO	979
551HO03594	PACO	979
7HO14264	SPEEDY	978
7HO12788	FRAZZLED	978
7HO13981	FREEBORN	978
29HO18674	CLARITY	977
1HO13802	ARKHAM	977
7HO12868	ADVANCE	977
551HO03721	SINBAD	976
11HO12241	ALTAPARAISO	976
551HO03369	NIGHTCAP	975
29HO17430	DAMIAN	975
29HO18733	KENDRICK	974
11HO12196	ALTAMONSON	974

HOLSTEINS the easy choice

Let it be clear, as you can see here, Holsteins offer you more of what you're looking for!







CARRYING ON TRADITION

Missouri dairymen set their sights on continuous improvement



It's an early-morning routine Dallas Cornelius knows well. Returning from the milk barn to the smell of coffee, he and his wife, Debbie, eat breakfast and enjoy some quiet time together as light begins to filter through the trees.

"It is my favorite time of the day," Dallas explains. "The early lactation group of cows have just finished milking in the parlor, and I think to myself, 'this is why I do what I do'."

In northwest Missouri's rolling hills, Dallas operates Buchanan County's only dairy operation. Once home to several dairies, the region has seen a steady decline as challenging times forced many out of business.

Perhaps a secret to the Cornelius family's success is an investment in Registered Holsteins[®].

"I like Registered Holsteins for the same reason most dairymen in North America do — they are a very profitable breed of dairy cattle," Dallas says.

His dad and uncle established the farm near Easton, Missouri, right after World War II. Dallas and his brother ran both the dairy and a row crop operation for many years.

"My dad had the vision to make the farm big enough so we could farm as a family and do it comfortably," Dallas says.

Six years ago, Dallas bought his brother's portion of the dairy and partnered with his 14-year employee, Isaiah Clayton. Since then, the dairy has gone by Cla-Cor Farms.

Today, the operation has 196 Holstein cows in the milking line that produces a rolling herd average of 26,000 pounds of milk.

Better and Better

The joy of seeing calves hit the ground that are better than their previous generation motivates Dallas to improve each family with every mating decision.

"My goal would be for every calf that hits the ground to be a potential excellent cow," he says.

As he walks the calf hutches along the north side of his property, he can see the genetic advancement first-hand. He knows that each new calf represents progress and higher production — and it's all led by improvements in health, management and genetics.

"We enroll in the Holstein COMPLETE® program because it helps us to get cows classified and calves registered, which are the beginning goals of our operation," Dallas explains.

Holstein COMPLETE integrates membership, registration, mating information, classification, pedigrees, genetic reports, and production records into one valuable and convenient package for producers.

By classifying, Dallas is able to see the linear breakdowns of each cow and use that information for mating purposes. It's valuable data that allows him to make improvements on the past.

"In general, we are making a better cow," Dallas says.

Striving for this continuous improvement, he selects bulls that will raise the Total Performance Index (TPI®) of

the next generation. He also uses the TPI formula as an indication of what is to come.

This commitment to better breeding has been recognized nationally. Cla-Cor Farms is a five-year Progressive Genetics HerdSM award recipient. This award identifies herds with a high level of genetic value based on average CTPISM (animals with production records and classification scores) and PTPI (parent average).

Return on Investment

Other dairymen in the region have also recognized Cla-Cor Farms' dedication to breeding good cows. Last year the farm sold more than 60 Holsteins.

"It's easy to sell good Holsteins," Dallas says.

Graduating from the University of Missouri in 1973, Dallas has seen a lot of changes in the dairy industry, chief among those changes is genetics.

"I have seen many changes over the years," Dallas explains. "A cow that averaged 15,000 pounds of milk was a good cow and a rolling herd average of 15,000 pounds of milk was a high average."

Today, his goal is to have all of the animals he sells produce 30,000 pounds of milk as a mature cow with 1,200 pounds of fat and 1,000 pounds of protein.

A Higher Calling

Dallas can't think of a better place than the farm where he grew up to have raised his five children. He explains that the responsibility and work ethic learned on a farm is second to none.

In order to sustain his way of life for future generations, Dallas knows that they will have to remain profitable. Registered Holsteins help him achieve that goal — and contribute to the global mission to supply a safe, reliable product for the world's consumers.

"Milk is in demand all over the world," he says. "The quality of milk that leaves dairy farms is so high. We're producing a product that people need, and we're also breeding a cow that dairy farmers need."

It is a purpose Dallas carries with him each and every day, from sun up to sun down.

"We take pride in producing the highest quality product we can," Dallas says. "Everything that we do is for the benefit of society."





Your Premier Tool for Managing Your Herd's Genetics

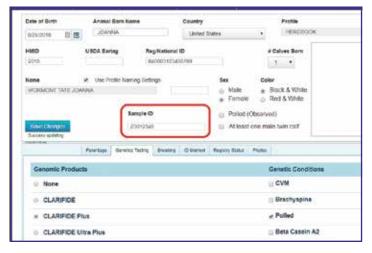
A little over four years ago, Holstein Association USA and Zoetis partnered to launch Enlight® – an online portal that provides dairy producers with access to genetic information on all of their identified Holsteins, along with reporting and analytical tools to help turn that information into meaningful decisions on the farm.

Since that time, over 20 new genetic traits have been developed for Holstein cattle, making tools like Enlight even more important to help manage a herd's data. Today, the program boasts well over 1,000 users, with over 2.6 million animals in the Enlight database, over 1 million of those being genomic tested. Enlight access is free for anyone genomic testing Holsteins on the CLARIFIDE® platform, ordering through Holstein USA or Zoetis.

Streamlined ordering

We are proud to offer the most streamlined genomic test ordering platform available in the industry within Enlight. Tests may be ordered quickly and easily for animals either at the time of ID, or for animals who are already identified.

For producers using Tissue Sampling Units (TSUs), the process could not be simpler. TSU numbers may be inputted into the Enlight genomic ordering screen, which will generate a packing slip on the submission page. This packing slip may be printed and TSUs can be put in the mail to the lab immediately; no waiting for forms to be emailed, and no need to individually attach TSUs to a form. Instructional videos on this ordering process can be found under the "User Guide" tab at www.enlightdairy.com.

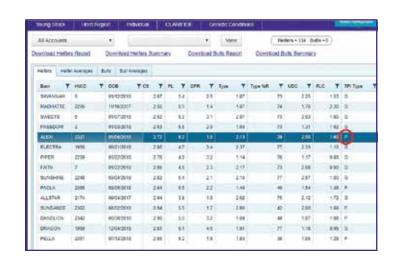


Access your results fast – as soon as they are available

Why wait hours or days to have access to your genomic test results? Enlight is refreshed with new genomic information every Tuesday morning. As soon as the genomic files are received and processed, data is pushed out to Enlight, giving animal owners instant access to their newest information. Enlight is also refreshed every evening to bring in new calves that have been identified and move animals who have changed ownership. After new official genetic evaluations are released, breeders can easily view the updates for their entire herd through the available reports.

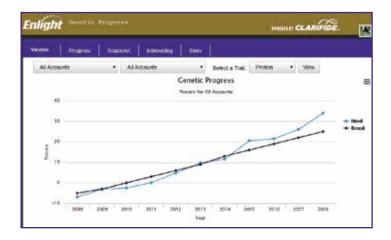
Never lose track of an animal

No matter what your genomic testing strategy is, Enlight makes it simple to keep track of which animals have been tested, or not. The Youngstock and Herd reports allow you to filter by "TPI Type", which is an indicator of whether an animal has been genomic tested or not. "P" indicates the animal has parent average genetic values; "X" and "G" indicate the animal has genomic values, either preliminary or official; and "C" indicates the animal does not have a genomic evaluation but does have classification and production information included in her genetic evaluation. Sort through your animals – both tested and untested – by your desired traits, and easily see if there are animals who are candidates for additional testing.



Benchmark your progress

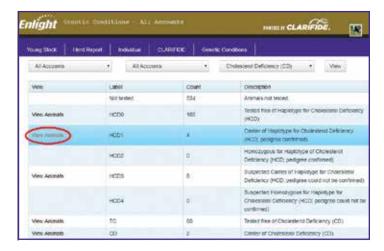
Most Registered Holstein breeders strive to improve their herd with each mating. Enlight displays 10-year genetic progress graphs for 13 different traits including TPI and NM\$, providing breeders a "report card" of the progress they are making in their herd, compared to the breed average. Genetic progress graphs provide facts on whether your herd is making progress for the traits that are important to you, and at what rate. While these graphs are not something a herd owner will look at on a weekly or even monthly basis, they can be useful to reference a couple of times per year to be sure your herd is headed in the right direction.





Keep track of genetic conditions

When new genetic conditions or haplotypes are identified, Enlight makes it simple to view carriers of the condition in your herd, as well as identify animals who may need additional genetic testing. The Genetic Conditions report allows users to view every genetic condition and haplotype recorded for Holsteins and displays the number of tested animals and their results. With one click, drill down and view a list of carrier animals.



Your data – when you want it, how you want it

The Enlight CLARIFIDE® report gives users the complete genomic profile of their animals. Every trait available for your animals is reported there – from the major production, health and conformation traits, to all of the individual linear type traits, and newer traits like Gestation Length and the CDCB health traits such as Mastitis and Ketosis.

All reports in Enlight can be sorted and filtered within the web browser window. Further, with one click, every report can be downloaded into Excel (or another spreadsheet program) for more intensive analysis, saving, or sharing.

Enlight is a valuable tool available to all Holstein breeders. There are several informational videos available under the Enlight "User Guide" tab to help you understand all of the features that are available. If you have a more specific question, you may call the Enlight support line (ext. 4003), or visit with your Holstein USA Regional Sales Representative.



Need help? Want to get started? Get in touch today!

enlighthelp@holstein.com or 800.952.5200, ext. 4003



PUTTING DOWN ROOTS

How one young couple decided to take a leap of faith and return to the family farm

only a stone's throw from the Canadian border, the sun peaks out over the brightly colored maple trees and through the open door of a 120-year-old barn. Light bounces off the aged tree posts and falls onto piles of feed — sitting, waiting patiently.

With a call from their owner, "All right ladies, come on in", 50 Registered Holsteins® find their stalls, ready for the next milking at Maple Grove Farm.

Andy and Sarah Birch have worked tirelessly all day preparing for this moment.

"My wife, Sarah, and I work well together," Andy says. "And we love being here all day, every day, with our daughter, Hannah."

The blond-headed two-year-old stares out the barn door, while cows munch their feed and her mom attaches milking units. As a small dairy with all hands-on deck, Hannah spends her days making friends with her "moo-moos" and handing out tiny handfuls of grain to her favorites.

The couple started milking cows at Andy's parents' farm in Derby, Vermont, in 2014. His parents milked in the same historic barn for 17 years before selling out while he was in college at the University of Vermont.

"Even though the hours are really long and we're always short of sleep and there's more than we can accomplish in a day, we at least always have each other," Andy says.

Returning Home

The decision to leave his employment at another dairy to start his own felt a bit like jumping off a cliff. However, Andy would not trade the opportunity to work for himself and his family.

"Working with my family has been the best part," Andy says. "I don't have another boss that I need to answer to, as long as I can do my best for my wife and my daughter, and for my cows, that's my ultimate responsibility."

The milk barn sat empty until Andy and Sarah decided they wanted to come home and start milking their own cows. Their initial challenge included preparing equipment that had not been used in nine years.

"We knew some of it wasn't going to work. We thought the bulk tank would be fine. It wasn't," Andy says. "When we thought we were a few days away from shipping milk, suddenly we needed to find a new major piece of equipment."

Despite start-up struggles, the pair have been able to successfully navigate unpredictable milk prices through planning and with Registered Holsteins.

"At the end of the day, having income over feed cost, milk per stall ended up winning out, in my business plan," Andy says. "Holsteins were most effectively able to generate that income over feed cost every day."



Working with genetics is a passion of Andy's. He feels the Holstein breed offers him the best opportunity to be a breeder and make improvements in his herd.

"Holsteins have the broadest availability of genetics," Andy says. "I think it helps me be able to advance my cows faster and correctively mate them."

The perfect cow for Andy is a medium-sized animal with great feet and legs for walking out to pasture.

Not only do Registered Holsteins offer depth in genetics, Andy also relies on Holstein Association USA and its programs to help him track his herd. Enrolled in the Holstein COMPLETE Program, Andy receives reports three times a year to see how his calves are improving compared to the national average.

"Holstein COMPLETE makes it very easy to register our calves and track their genetics," Andy says. "It gives us tools to easily and consistently manage our genetics, and track who's in our herd and their genetic values."

Maple Grove Farm also participates in genomic testing. All of their animals on the farm are tested, with the goal to quickly accelerate the herd's genetic improvement.

Family Branches

Growing up with registered animals, it made perfect sense for Andy to continue in the Holstein tradition. He got his start in Holstein Association USA through showing in 4-H and the Junior Holstein Association. He says his involvement in these programs is one of the reasons he wanted to come back to the farm.

"It really gave me some connection to the industry to keep my interest going into college and through college," Andy says. The youth programs were also the reason Andy and Sarah met.

Helping his younger brother one year at the county fair, Andy met Sarah who was also exhibiting. Although she did not grow up on a farm, Sarah was involved in showing and pursued a career in the dairy industry as a milk tester before they returned to the farm.

"One of the reasons we wanted to be back here, was because with us working separate jobs we hardly saw each other some days," Andy says.

"We've learned that nothing said when moving cows should be taken to heart. But overall we respect each other, and we try to take each other's needs into account."

Four years into their new adventure, the couple has some advice for other young people interested in starting their own dairy.

"It's doable, but you've got to do your homework," Sarah says. "You've got to make sure that it's an option for you."

Selling their milk to Cabot Creamery in Cabot, Vermont, their milk is consumed by the public as Cabot cheese. Being close to large population centers on the East Coast, communicating with consumers is very important to Maple Grove so they have participated in open houses for local consumers.

"We realize that we are making food for people, and that we have that responsibility to our consumers," Andy says. "At the end of the day, I want every drop of milk that leaves this farm to be something that I'd gladly pour on my own cereal in the morning."



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Holsteins were most effectively able to generate that income over feed cost every day."

- Andy Birch -

