

# THE PULSE

Winter 2019 • Holstein Association USA, Inc.

**U.S. REGISTERED HOLSTEINS®**

THE WORLD'S PERFECT COW

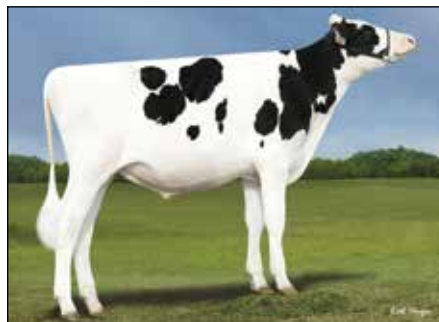
The Pulse is proudly sponsored by



# HOLSTEIN ASSOCIATION USA LAUNCHES HOLSTEIN MARKETPLACE SIRES



Speek-NJ of Dewgood-ET



Golden-Oaks Imax Lotto



Hurtgenlea Splnd Maurice-ET RC PC



Trent-Way-JS Roddy-ET RC

**H**olstein Association USA announces a new service to assist Holstein breeders to market semen to other dairy cattle breeders. Holstein Marketplace Sires – a new component of the Holstein Marketplace gives Holstein breeders the ability to directly market semen from their bulls, which will be beneficial to Holstein Association members, and dairy cattle breeders throughout the United States.

“Holstein breeder/members have been looking for a vehicle to market semen of high-quality genetics from their own herds to other breeders. Holstein Marketplace Sires does just that.

“Holstein members now have the opportunity to offer semen from bulls out of deep pedigreed cow families that excel in production, genomics, health traits, reproduction, and type. Breeders will have the opportunity to select from phenotypically proven cow families that emphasize longevity and continue breeding programs to fit their own individual goals,” states Holstein Association USA President Boyd Schaufelberger.

Holstein Marketplace Sires, a division of Holstein Services Inc., provides a new and unique avenue for Holstein breeders to market their genetics. Under the program, the bull owners retain ownership of the bulls, and Holstein Marketplace Sires provides the vehicle for the semen to be sold.

For both buyers and sellers alike, Holstein Marketplace Sires will be a trusted source for dairy cattle genetics. Bulls available at the launch of Holstein Marketplace Sires include:

- **SPEEK-NJ OF DEWGOOD-ET**  
owned by E. Dean & Wanda Good, Oconto, Wis.
- **GOLDEN-OAKS IMAX LOTTO**  
owned by Golden Oaks Farm, Wauconda, Ill.
- **HURTGENLEA SPLND MAURICE-ET RC PC**  
owned by Hurtgenlea Holsteins Ltd, Elkhorn, Wis.
- **TRENT-WAY-JS RODDY-ET RC**  
owned by Trent J. Hendrickson & John R. Schneller, Blanchardville, Wis.

These bulls offer depth of maternal pedigrees, featuring multiple generations of high producing Very Good and Excellent dams. Their strong pedigrees are complemented with the bulls’ high-ranking genomic evaluations resulting in a balance of production, health, reproduction and type. Holstein Marketplace Sires will be a unique addition to any Holstein breeders breeding program.

Purchasing semen with your credit card couldn’t be easier with two methods – online or over the phone. Buy online by visiting [www.holsteinusa.com/marketplacesires](http://www.holsteinusa.com/marketplacesires), click the red “buy now” button, fill in number of units you would like to purchase, and check out using our secure online system. Or, phone in your semen order by calling customer service at 800.952.5200.

## About the Holstein Marketplace

Holstein Marketplace provides easy, affordable advertising to help Registered Holstein breeders buy and sell Holstein genetics. The advertisements are grouped into broad categories for Females, Breeding Bulls, Embryos and Sales/Dispersals.

Visit [www.holsteinusa.com/marketplacesires](http://www.holsteinusa.com/marketplacesires) to place your order.



# PROFITABILITY IN BLACK AND WHITE

How one family arrived in the Registered Holstein® business, and never looked back.

**I**n north-central California, near the town of Atwater, a pair of brothers pass through the freestalls of their family's dairy barn.

They pause beside a pen where, just minutes before, a set of twin calves took their first breath.

"Every time a new calf is born, you've had some part of the responsibility of mating that sire to that particular animal, with the hope that it will be profitable and beautiful," Dino Migliazzo says. "There's a tremendous sense of satisfaction from that at the end of the day."

The Migliazzos have been caring for dairy cattle and involved in producing nature's most nearly perfect food for generations. Theirs is a story of innovation and change, and how a commitment to improved genetic progress drives efficiency and productivity.

Their key to success? Registered Holsteins®, and the Holstein Association USA that backs them.

## **The Value of Registered Holsteins® has Grown**

The brothers, Dino and Dante Migliazzo, took over the management of the Migliazzo & Sons Dairy from their mother in 1992, eight years after their father had passed.

Decades earlier, their father took a chance that would result in the family's dairy success.

Using money he'd made farming tomatoes, he invested in a herd of grade and crossbred cows and began milking on a rented facility south of Merced.

Then, in 1967, he bought a farm with 100 cows on 100 acres in Atwater. It was a choice he never regretted.

"There were some Registered Holsteins that came along with it," Dino explains. "So Registered Holstein cows came along as a bonus."

For the Migliazzos, the value of Registered Holsteins has only grown through the years.

"The difference with Registered Holsteins is it lets us have a laser-focus on what we're trying to do from a breed standpoint," Dino says. "We immediately understood and put value on genetics, and I think Holstein USA kept that on the front burner for us."

Dino says Holstein Association USA has allowed them to select specific bulls from the Official Top 100 TPI® Bulls List, implementing chosen genetics into the herd and enhancing already-efficient milk production.

## Excellent Production and Type

“If you’re going to make progress, you have to incorporate high genetic bulls into your breeding program,” Dino says. “We focus on net merit, but at the same time, we make sure the component side of it is addressed.”

And their attention to enhanced performance shows.

Twice a day, the Migliazzo’s milk 840 Registered Holstein cows. They have achieved a rolling herd average of 33,000 pounds of milk with 1,200 pounds of fat and 1,100 pounds of protein.

Those are impressive statistics for any operation, and Migliazzo & Sons Dairy was recognized as a Herd of Excellence in 2017.

The family is proud of the progress they’ve made in just one generation. They’ve grown from 100 cows on 100 acres back in 1967, when their father moved to their present location.

“We’re now one of the highest-producing Holstein herds in the state of California,” Dino says.

The state of California, however, is known for large-scale agriculture production. The herd size of the Migliazzo & Sons Dairy is slightly smaller than average for the region, which typically sees operations around 1,200 to 1,400 cows.

All the more reason to make each individual animal perform to its highest potential.

“A dairy of our size in California has almost become an anomaly,” Dante says. “The only chance we have of surviving here is to maximize what we have available to us in terms of our facility’s resources, our land resources and, obviously, our human resources.”



## Holstein USA Contributes to Profitability

“The Registered Holstein business has advanced the genetic base of our herd,” Dante adds. “The Holstein Association USA has been a big part of our profitability. As profitability increases, you have the ability to expand your herd, your facilities, and your land base.”

Not only has growth and profitability helped Migliazzo & Sons, it has contributed to the prosperity of California’s economy. An estimated 440,000 jobs in the state of California are provided by the dairy industry alone.

“There’s a tremendous amount of opportunity for people to work in an agricultural enterprise,” Dante says. “Whether it be in production, services, processing, hauling, movement or transportation. Those jobs trickle down into the local community. They put food on tables and children in schools. And it ultimately helps support other industries.”



Dino & Dante Migliazzo, Atwater, Calif.



# STEPS FOR PROPER TAGGING

Darin Johnson, Dairy ID Programs Manager

**T**ag retention is critical for proper animal identification. Although some level of tag loss is to be expected through normal wear and tear, higher levels of tag loss can indicate on-farm tag retention issues. It is also important to note that when caught on something in the animal's surroundings, Allflex eartags are designed to break to avoid tearing the ear.

Before applying our first tag, it's important to check that we're using the proper equipment, and that it's in good working order. To apply Allflex tags, both visual tags and RFID (radio frequency identification) tags, you should be using the red Universal Total Tagger with a red blunt pin. The red Universal Total Tagger also includes a black clip that should be in place when applying visual tags and removed for applying RFID tags. For those producers that are using both RFID tags and visual tags, we recommend two separate taggers so you don't have to keep removing or replacing the black clip. If the tagger has been damaged, or if you're still using an old orange or blue tagger, we recommend replacing it with the red Universal Total Tagger. If you are using a red Universal Total Tagger, but your pin is not red, is broken or bent, you should replace the pin to prevent damage to the tag during application. The red Universal Total Tagger houses a spare red blunt tip pin in the handle. Replacement pins can also be ordered from Holstein USA. Using the

correct, properly maintained equipment can reduce damage to the tag during application and improve tag retention.

Tag placement on the applicator can also impact retention. Tags not placed on the applicator completely can cause misalignment of the male and female tags during application. Damage can occur to the male stem or the female tamperproof cup, increasing the chances of poor retention. A damaged or missing applicator pin tip will not properly support the tag during application. Damage to the male stem will occur, increasing the risk of male stem failure.



Broken pin on left.



Damaged male stem.

## Visual Tag Application

For visual tags, make sure the black clip is in your red Universal Total Tagger. To load the tag, depress the spring clip and insert the female tag into the jaw of the tagger. Slip the male tag completely onto the red blunt applicator pin. Check the alignment of the tags by lightly squeezing the handle of the applicator. *Caution: Do not squeeze so tightly that the tags become attached.* The male tag should align with the center of the female tag. If the tags do not align, proper application will not occur and the tag can be damaged. If needed, replace the applicator pin. The final step before tag application, dip the jaws of the tagger holding the tag into an antiseptic or disinfectant solution to help prevent infection.

## RFID Tag Application

For RFID tags, the black clip should be removed from the red Universal Total Tagger. Press the spring clip and insert the female RFID tag. Make sure the raised portion of the RFID tag, which includes the transponder, fits into the open portion of the jaw. The arrow on the back of the RFID tag should point outward. Slip the male tag completely onto the red blunt applicator pin.

Lightly squeeze the handle of the tagger to check the alignment of the male and female tags. *Caution: Do not squeeze so tightly that the tags become attached.* The

male tag should align with the center of the female tag. If the tags do not align, proper application will not occur, and the tag can be damaged. If needed, replace the applicator pin. The final step before tag application, dip the jaws of the tagger holding the tag into an antiseptic or disinfectant solution to help prevent infection.



Removing the black clip.



Proper alignment of RFID tag.

## Proper Tag Placement

Make sure the application site is free of foreign debris to prevent infection. The female tag should be applied to the inside of the ear. It should be placed in the middle section of the ear between the two cartilage ribs. To apply the tag, restrain the animal's head. Find the proper tagging location and firmly squeeze the applicator until you feel the snap of the tags attaching.

CORRECT:



INCORRECT:



Relax your grip on the applicator and remove. Tags placed too close to the edge of the ear have an increased chance of being caught and torn out. Positioning the tags too close to the animal's head can cause infection and necrosis due to poor air flow around the application site.

Several other on farm factors can contribute to retention issues. Fencing and headlocks can create opportunities for the tags to become caught and

**Replacement tags can be ordered by contacting Holstein USA customer service or your regional sales representative.**

break when the animal attempts to pull away. Tags can also become caught in twine or netwrap, when left on round bales. Also, any sharp points on fences, gates, or other equipment that cattle may scratch their heads on can have a negative effect on tag retention.

Using and maintaining the correct equipment, placing the tag in the proper location in the ear, and reviewing the animal's surroundings can all help improve tag retention on your farm.

Replacement tags can be ordered by contacting Holstein USA customer service or your regional sales representative. If you are experiencing tag retention issues, please contact Darin Johnson, [djohnson@holstein.com](mailto:djohnson@holstein.com) or 800.952.5200 ext. 4048, so we can help identify the problem and suggest solutions.

## New Haplotype Impacting Fertility Reported in December 2018

A new Haplotype Impacting Fertility (HH6) was discovered by French researchers, and first reported on at the International Committee for Animal Recording (ICAR) meeting in February 2018. HH6 haplotype test results for all genomic-tested Holsteins were first released in conjunction with the December 2018 genetic evaluations.

The current frequency of HH6 in U.S. data is 0.5 percent, according to the Council on Dairy Cattle Breeding (CDCB). Looking at December 2018 genomic-tested available AI bulls, there are only eleven HH6 carriers out of 2,744 tested bulls (0.4 percent frequency) in that population. As such, HH6 is a trait that Holstein breeders should be aware of, but due to its low frequency in the U.S. breeding population, pregnancy loss from HH6 carrier-by-carrier matings are currently infrequent.

Holstein breeders can find the status of their animals using the Family Tree Search on the Holstein Association USA website ([www.holsteinusa.com](http://www.holsteinusa.com)) or in Enlight® ([www.enlightdairy.com](http://www.enlightdairy.com)). Additionally, the status of available AI proven and genomic young bulls can be found for all the haplotypes impacting fertility in Section 5 of the Red Book. You can find more information about HH6 on the Council on Dairy Cattle Breeding website, [www.uscdcb.com](http://www.uscdcb.com), under What's New, then News, in their November 14, 2018 article on CDCB changes to evaluation system (December 2018).

*Tune in this February:*

# HOLSTEIN AMERICA

HOLSTEIN ASSOCIATION USA

**Feb. 7 at 9 P.M. CST**

**RED TV**

*Sponsored by Merck Animal Health*



Michael Santos, Tulare, Calif.

## PROFIT THROUGH REGISTERED HOLSTEINS

Terra Linda Dairy commits to next-level genetic performance on their central valley farm.

**I**t's a bright California morning, and Michael Santos pulls a worn notebook from his front-shirt pocket. With a careful eye, he appraises a group of Registered Holsteins®, scribbling down notes to identify milestones or areas of improvement.

Every piece of information, he has learned, contributes to future progress.

The fourth-generation dairy producer is driven by data. He spends hours analyzing performance reports, genomic results and pedigrees, as well as studying cattle in the parlor and out in the barns. It's knowledge made possible thanks to generations of Holstein breeders contributing records to Holstein Association USA.

"The genetic progress the Holstein breed has made over the years is amazing," he says. "Many calves we're calving in are from elite families, elite cow sires. And that's the end goal: to have a whole herd of elite animals."

Michael, alongside his brother, Craig, and father Mike Sr., run Terra Linda Dairy near Tulare, Calif., where they milk 1,300-head of Holstein cattle, and have a 33,275 pound rolling herd average.

Near the heart of California's rich, agricultural central valley, Michael's father and grandfather built the dairy

from the ground up. A drive down roads in Tulare County reveals nearly endless rows of cotton, almonds, pistachios, grapes and many other specialty crops.

After graduating with agricultural business and dairy science degrees from the University of Cal Poly, San Luis Obispo, Michael returned home with a mission in mind.

"...to take our genetic program to the next level," he says. "We'd always concentrated on genetics, but I wanted to accelerate that and our cows' efficiency. I felt like we were never going to be the largest herd, but I still wanted to maximize efficiency per cow unit."

The first step toward that goal was enrolling in Holstein Association USA's Start-Up program. It's an initiative that allowed them to increase the percentage of Registered Holsteins within their herd by building up grade Holsteins to registered status. The result is an entire herd that's now registered — and on track for the opportunities of the future.

"Registered Holstein cows add a premium to their value," he says. "When I market cattle, and when I have that piece of paper, it matters. It's not just an everyday, run-of-the-mill Holstein cow. We can tell you exactly where she's from, and can predict her future through genomics. To me, that adds value."

## More Data, More Value

Registering cattle through Holstein Association USA has opened many doors for Terra Linda Dairy, including access to industry leading genomic information and performance data.

A commitment to continuous improvement is something they strive for with each animal.

“We genomic test every calf at birth with a Tissue Sampling Unit. The calves also get a Holstein tag and an official RFID coming straight from the Holstein Association,” Michael says. “We like to know where all our cattle are genomics-wise. We’re able to make management decisions based on that, whether we’re selling cattle, breeding cattle or using them for donors to make embryos.”

Access to predictive information through genomic technology helps define a calf’s future role within the herd, and its potential value.

Terra Linda Dairy has established an extensive donor program by using genomic data to identify herd outliers and potential donors that have desired traits for key measures like reproduction, health and type.

Michael says they are only able to find those ideal traits through genomic testing.

“To us, it’s worth the dollar investment you’ll make,” he says. “You get a predictive future on each animal, and it helps make decisions for us. The industry’s made several recent strides in it, and it’s become more reliable over the years. It’s a tremendous tool to have at your fingertips.”

The donor cows have developed a successful market for elite embryos from Terra Linda Dairy. The operation’s IVF program stays busy throughout the year, Michael explains, as they IVF about 20-25 donors every two weeks. They conventionally flush four to six donors about twice per month, as well.

“We want to keep progressing in the embryo market,” Michael says. “We’re putting in hundreds of embryos a month, and we’re working with other herds as well. Our goal is to keep pushing that forward.”

As science fuels greater precision in genetic selection, dairy farmers are seeing real results within the herd. Everything from improved udders, feet and legs, production efficiency and longevity.

This leads to profit and progress — a new vision for any dairyman wishing to grow and expand their herd more than they ever could before. And it is all linked to the registration issued by Holstein Association USA.

“It’s a good feeling when you wake up in the morning, and see the people on your dairy helping you achieve your goals, and you’re helping them achieve theirs,” Michael says. “It’s a team effort.”

## Looking Ahead

By developing superior genetics into new calves every year, Terra Linda Dairy’s herd has become increasingly efficient. It is now the second highest producing dairy herd in the state of California, Michael says.

But the forward progress won’t stop here.

“I always thought that 30,000 lb. rolling herd average was the magic number, and that was as high as one could go,” Michael says. “Technology and genetics have come so far. And we’ve learned so much about the cow and how to take care of her better. With the quality of bulls that are available, it’s just unbelievable how you can make progress.”

He adds that their goal is to make a 1,000 lb. increase each year to the herd’s RHA.

That’s a worthy ambition, and one that will ensure the world’s refrigerators remain stocked with the safest, high quality milk and dairy products available.

“We love producing food for people across the world,” Michael says. “We take a lot of pride in knowing we can make food for people that can nourish their bodies. It’s a healthy product, we treat our animals with care, and we love what we do.”







# THINKING GLOBALLY

Quality genetics provide export opportunities for RuAnn and Maddox Dairy.



Steve Maddox, Riverdale, Calif.

**A**t the center of California's San Joaquin Valley, towering palm trees welcome guests to the barns at RuAnn and Maddox Dairy near Riverdale. Thousands of Registered Holsteins® call this place home — a region known as the most productive agricultural area in the world.

More than 300 commercial crops are grown in Fresno County, and on the Maddox family farm, rows of corn, grapes, almonds and olives extend for miles.

Back in the barn, the herd's first-lactation heifers are grouped to be evaluated through Holstein Association USA's classification program. It's a practice they do three times per year, allowing them to study each animal individually.

Shouts of identification numbers echo through the barn's long alley, while the Holstein Association USA classifier assesses 20 linear traits in five major breakdowns. He watches as the cows walk down the pens and quickly punches rankings into a hand-held computer.

"It gives them a score that we can compare with other cows, not just in the United States, but around the world," Steve Maddox says. "It helps in establishing values and priorities, of not just what they bring to our herd, but to the entire industry."

Classification plays a pivotal role in how the Maddox brothers, Steve and Patrick, evaluate their herd's genetics. They review the linear data alongside genomic results gathered from genetic testing — every female that's born on the farm is genomically tested, Steve says. This insight allows them to prioritize cows for specific traits and determine each cow's future market potential.

It's the first step in an important process of producing efficient milk cows, high performing bulls for commercial customers and elite embryos for export worldwide.

"We're safeguarding the genetics for the whole industry," Steve says. "Our efficiency has improved by 70 percent in the last 70 years because of our genetics promoted by the Holstein industry."

Whether it's milk production or better use of resources, better cow comfort, or better management practices for our families and communities — it's all been led by the genetic efforts of the Holstein Association."

## **It Starts with One**

Patrick and Steve explain that their love of the Holstein business was instilled in them by their father, Doug.

"Our dad was always very progressive," Patrick says. "A lot of people will come to California and stop by RuAnn, because of the legacy my father left."

Doug Maddox was a teenager living on the family's farm near Laton, California, when a neighbor gave him a Holstein calf. It came with a promise that he would go to college, which sparked a passion in him for the dairy industry.

After graduating from the University of Cal Poly, San Luis Obispo, where he had a lot of dairy judging success, he started gaining interest in the Registered Holstein business.

In 1957, Doug and his father established RuAnn Dairy with 28 Holsteins and 500 acres of farmland.

"There was a big demand back in the 50s and 60s for fluid milk in the state," Steve explains. "They were able to expand, and with financial institutions help, export milk to the world."

Thirty percent of the current milk supply in California is for export, Steve says, mainly to the far East: "It's cheaper to ship our dairy products to China than it is to Chicago."

As a result of their ability to provide quality milk and consistently breed higher performing animals, the family's dairy herd has experienced outstanding growth through the years.

Now, after more than six decades, the RuAnn and Maddox herds consist of more than 4,000 Registered Holsteins and 10,000 acres of farmland. That places them among the nation's largest registered dairy operations.

"There's nothing like showing cattle and taking a little extra interest in breeding better Registered Holsteins," Steve says. "The eternal optimists that dairymen are, purebred people are even more so, because they visualize what mating that semen with that cow will give you, three and four years down the line. It's forward thinking."

## **Promising Future with Registered Holsteins®**

Patrick runs operations at the original RuAnn Dairy home place today, while Steve manages Maddox Dairy, 10 miles down the road.

Much of their success can be credited to diversifying beyond milk sales. They've been involved in all sides of the industry — from providing registered bulls for the commercial producers to exporting high-quality embryos worldwide.

"That's probably the most exciting thing; what you can do for other parts of the world," says Patrick, who explains that they've been exporting embryos for 25 years. They sell anywhere from 1,500 to 3,000 embryos per year and have their own in-house in vitro fertilization lab.

"Our biggest opportunity is genetic gain," Patrick says. "Through embryo transfer, through genomics, we can make tremendous gains making a more profitable cow — a cow that's more efficient, more fertile and a higher producer."

The Maddox family relies on Holstein Association USA programs like Holstein COMPLETE® and Enlight® to better collect and manage the herd's performance data. The value of that information allows them to continue moving forward with each generation.

The potential, as the Maddox family has discovered, is limitless.

"Registered Holsteins secure my future mainly because my future is in my kids and my grandkids," Steve says. "We have a tremendous asset in the genetics and there's a demand for it around the world. If customers want the highest quality dairy products and the best genetics available, they come to the United States."