UF IFAS
UNIVERSITY of FLORIDA
Department of Animal Sciences

Dairy Update

Quarterly Newsletter **Summer 2026**

In this Issue

Reserve the Date: First Dairy Huddle Meeting on Dairy Cattle Genetics: October 23, 2026

Dairy Huddle - Short interactive meetings on emerging areas of dairy cattle management

What's New in Dairy Cattle Genetics
Friday, October 23, 2026 @ 10 AM
Alliance Dairy, Trenton Florida

Schedule:

10:00 AM	Christine Baes, University of Guelph: New traits for dairy cattle genetics.
10:30 AM	Pete Hansen, University of Florida: Even poorly heritable traits can be improved through genetic selection – the daughter pregnancy rate example
10:45 AM	Break
11:00 AM	Haipeng Yue, University of Florida: Integrating image-based digital phenotypes into dairy genetic analysis.
11:30 AM	Eric Diepersloot, Full Circle Dairy, Lee FL: The genetic selection program at Full Circle Dairy.
11:45 AM	Johan Heijkoop, Milk-A-Way Dairy, Mayo, FL: The genetic selection program at Milk-A-Way Dairy.
12:00 PM	Roundtable discussion with all speakers
12:30 PM	Lunch, courtesy of Select Sires

More information will be forthcoming.
Organizer: Pete Hansen, pjhansen@ufl.edu

New Chair for the Department of Animal Sciences

Dr. Dean Pringle has been selected as the new chair of the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Department of Animal Sciences. He will start as chair on July 31, 2026.

Pringle, who is currently the director of the UF/IFAS North Florida Research and Education Center (NFREC) in Quincy, Marianna, and Live Oak, Florida, said that as a fifth-generation Floridian, he understands how essential the beef, dairy, equine, small ruminant and animal products industries are to the state.

Dr. Dean Pringle, incoming chair of the Department of Animal Sciences

"First and foremost, we have to support our Florida stakeholders, including our students, and provide them with the knowledge needed for continued success," he said. "They are our future, so whether it is through applied and basic research, classroom and experiential learning or problem-solving on our farms and ranches, we must commit our best for the next generation of Florida's animal agriculture." He said he's excited to renew his passion for working with students and investing in their professional growth.

"Dr. Pringle has a biography with experience in all three mission areas and well-developed stakeholder relationships that point to success leading this complex department," said Dr. Rob Gilbert, UF/IFAS dean for research and executive director for academic affairs.

Pringle grew up on a beef cattle family farm in Immokalee, Florida and comes to the department with deep knowledge of Florida's cattle industry. A graduate of UF, Pringle earned his bachelor's and master's from UF's Department of Animal Science in the UF/IFAS College of Agricultural and Life Sciences.

He went on to be a professor at the University of Georgia before joining UF. During his time teaching at UGA, he taught various animal science courses, including the favorite among students: The All-American Hot Dog, a class that taught about the history, the cultural and economic value and the technical process from beginning to end of making a hot dog.

In 2023, he became director of the NFREC in 2023. In the three years as director, Pringle has helped the center receive state funding for renovation and expansion, secure a $10 million multi-state research grant and earn numerous faculty awards. He hopes to continue that momentum of diversified funding and faculty achievement in his department.

He is highly respected by industry stakeholders and has built a close relationship with the Florida Cattlemen's Association through a shared vision for the future of Florida's animal industries.

His own research has included collaborations with other universities and USDA partners, demonstrating a focus on industry challenges, Gilbert said.

Gilbert said he is grateful to Dr. Jay Ferrell for serving as interim chair of the department while also serving as chair of the Department of Agronomy and director of the Center for Aquatic and Invasive Plants. Ferrell succeeded Dr. John Arthington, who returned to faculty at the UF/IFAS Range Cattle Research & Education Center in Ona in 2025.

Dr. Jay Ferrel, interim outgoing chair of the Department of Animal Sciences since August 2025

Source: https://blogs.ifas.ufl.edu/news/2026/04/23/pringle-to-be-chair-of-uf-ifas-department-of-animal-sciences/

UF Dairy Science Club Visit to Mr. Don Bennink

Just before his passing, members of the UF Dairy Science Club visited Mr. Don Bennink at his home in Branford, FL. He founded North Florida Holsteins, one of the most respected dairy operations in the country. Dairy Science Club vice-president Jenna Larson contributed the following:

"In March, Mr. Bennink invited us to his home to have dinner, and he spoke to us about the history of Florida Dairy Farming and his role as a dairy farmer and key player in Holstein genetics. He was a great dairyman and an important supporter of UF Animal Sciences. I think he was shocked to see that the Dairy Science Club was mostly young women ... The first thing he told us was that: "There would be a lot more farms in business if dairymen really loved their cows. I really loved and still do love Holstein cows."

Mr. Don Bennink passed away on April 20, 2026. He was a true friend of UF and is missed by many in the UF animal and veterinary sciences community. His obituary is at https://www.watsonmilton.com/obituaries/donald-bennink

Mr. Don Bennink with members of the UF Dairy Science Club. March 2026. Photo: Jenna Larson

Mr. Don Bennink talks about Florida dairy farming to members of the UF Dairy Science Club. Photo: Jenna Larson

UF Dairy Science Club vice-president Jenna Larson and Mr. Don Bennink. March 2026. Photo: Jenna Larson

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Using Genomic PTAs for Fat to Estimate Actual Fat Production of Dairy Cows

Albert De Vries

Dairy producers in the Florida and Southeast Federal Milk Marketing Orders are primarily paid on pounds of skim milk (milk without fat) and fat. For example, May 2026 pay rates received at the UF/IFAS Dairy Unit were $18.7941 per cwt of skim milk and $1.7896 per pound of fat. In May, 31% of milk revenue received at the UF/IFAS Dairy Unit was due to shipped fat and 69% due to skim milk.

The bulk tank averages for the month of May at the farm were 4.46% fat and 3.32% protein. Cows vary in fat (and protein) percent, and therefore the value of one pound of milk is not the same for all cows. If we simply look at pounds of milk produced, we may misjudge the revenue of some cows when making, for example, culling decisions.

The UF/IFAS Dairy Unit participates in DHI milk testing to get individual fat and protein percentages. In May, 397 cows were tested. The testday revealed that 10% of cows had fat percentages of 3.5% or less and another 10% of cows had fat percentages of 5.7% of more. A cow that produced 70 pounds of milk with 3.5% fat generated $17.08 in revenue. A cow that produced 70 pounds of milk with 5.7% fat generated $19.55 in revenue, a difference of $2.47 per day.

The variation in protein percentage was less: 10% of cows had protein percentages of 3.1% or less and another 10% of cows had protein percentages of 4.1% of more. Protein varies less than fat.

Figure 1 plots the ponds of milk vs. the pounds of fat for these 397 cows. While cows that produced more milk typically produced more fat, the correlation is only 63% (100% means perfect association, 0% means no association).

Figure 2 plots the ponds of milk vs. the pounds of protein. The relationship between milk and protein pounds is much stronger than with fat; the correlation is 91%.

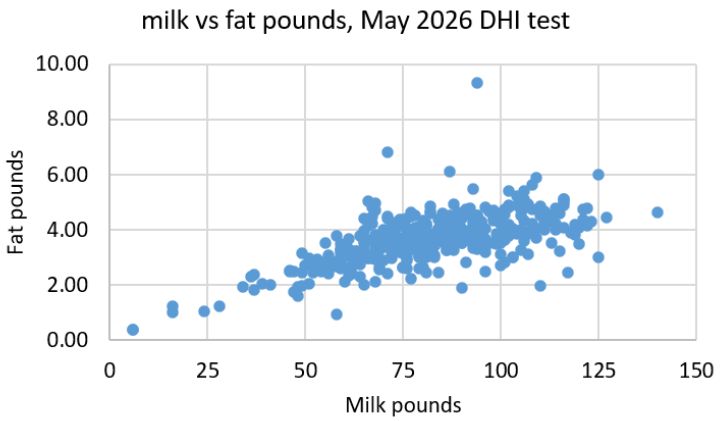

Figure 1. Ponds of milk vs. the pounds of fat for 397 cows tested in May 2026. The correlation is 63%.

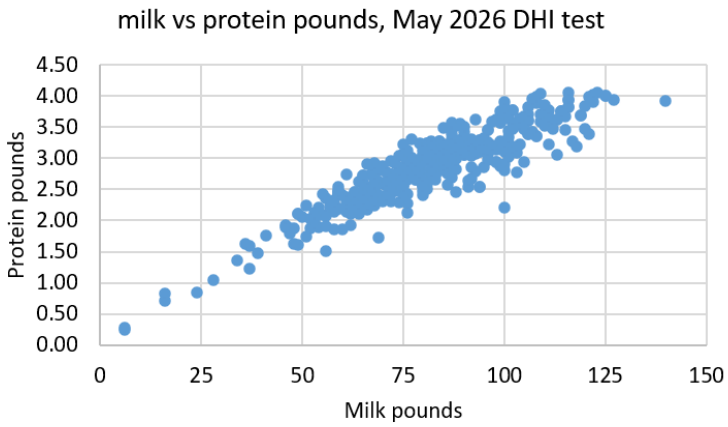

Figure 2. Ponds of milk vs. the pounds of protein for 397 cows tested in May 2026. The correlation is 91%.

Most cows in the Southeast are not monthly tested for fat and protein content, but many are genomically tested. A genomic test produces predicted transmitting abilities (**gPTA**) of fat and of protein, among other traits. Such a test estimates the genetic differences in the ability to produce fat and protein pounds. How well can the gPTA of fat replace a monthly DHI test? Or in other words, how useful is the gPTA of fat to rank cows on the value of their milk?

To investigate, we use both gPTA and the May 2026 milk test data for cows at the UF/IFAS Dairy Unit. All cows were genomically tested as calves. The gPTA of fat is expressed in total pounds in 305 days, relative to an "average" cow born in 2020 which has by definition a gPTA of 0 for all traits.

Figure 3 shows a weak relationship between the gPTA of fat and fat pounds produced. The correlation is only 17%. The correlation between gPTA of fat and fat percentage is similarly low, only 19%.

Looking at the black line in Figure 3, which is the best fitting line through the observations, the average predicted weight of fat is 3.62 pounds, with a minimum of 3.59 pounds when the gPTA of fat is about -50 and a maximum of 3.65 pounds when the gPTA of fat is about 100 pounds.

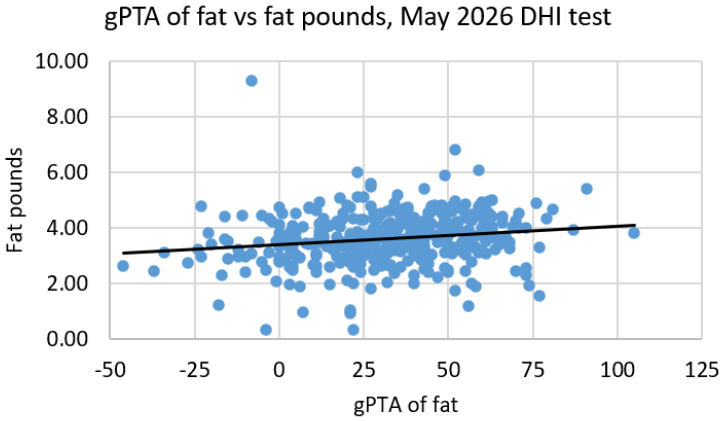

Figure 3. Genomic predicted transmitting ability (gPTA) of fat vs. the pounds of fat for 397 cows tested in May 2026. gPTA of fat by itself is a poor predictor of testday fat pounds.

The black line in Figure 3 is the best prediction of fat pounds on testday using only gPTA of fat as a predictor. One way to measure how well the black regression line predicts the actual fat pounds is the mean absolute deviation, or **MAD**. The MAD is the average deviation (difference) between the predicted fat pounds and the actual fat pounds for every cow. "Absolute" means that overprediction and underprediction count the same; we take the absolute value. The better the prediction, the smaller the MAD. The ideal prediction has MAD=0.

The MAD in figure 3 is 0.656 pounds of fat. That means that the average error we make when predicting fat pounds from only gPTA of fat using the black prediction line is 0.656 pounds of fat (too high or too low predicted).

We can do a little better predicting actual fat pounds by making a prediction equation that includes only the actual pounds of milk. In that case the MAD is 0.498 pounds. This is a reduction in the MAD (an improvement) of 24%. Actual milk yield is a better predictor of actual fat pounds than the gPTA of fat.

We can also use both the gPTA of fat and actual milk yield together. In that case, the MAD of the prediction equation is further reduced to 0.483. This equation is an improvement of 26% compared to only the gPTA of fat, but only a 3% improvement compared to using only the actual milk yield.

The last equation explored for this article contained the actual milk yield, the days in milk of the cow on testday, and the three gPTAs of milk, fat, and protein. This equation resulted in a MAD of 0.404 fat pounds, and is an improvement of 38% compared to using gPTA of fat only. However, this equation is only a 19% improvement in MAD compared to using only actual milk yield.

This analysis shows that the genomic PTA of fat can help a little with the prediction of actual fat pounds, but its value to predict single testday fat pounds is minimal. The genomic PTA of fat cannot replace milk sampling and analyses.

There is more to the story of genomic PTA of fat and fat production than this analysis of single testday data can reveal. For example, the genomic PTA of fat may be a more meaningful predictor of total lactation fat pounds, in part because fat content can vary quite a bit from milking to milking.

More information, Albert De Vries, devries@ufl.edu or call (352) 392-1981.

Some UF Dairy Extension Materials No Longer Available Online

The University of Florida is responding to new Americans with Disabilities Act (ADA) Title II regulations released by the U.S. Department of Justice on April 24, 2024. The new regulations mandate that web content and mobile applications offered by public entities will conform to WCAG 2.1 level AA standards, with few exceptions, by April 24, 2026. These standards describe accessibility rules for web content, such as text alternatives for non-text content (alt text for images) and captions for video, audio descriptions for media, among many others. Much of the online dairy Extension content did not conform to one or more of these standards. As a result, many of the Extension materials that were posted on the Department of Animal Sciences website at https://animal.ifas.ufl.edu are no longer available online. For more information: https://accessibility.ufl.edu/

Update on Slick Holstein Bulls Marketed in the United States

Pete Hansen

Since the availability of semen from Holstein bulls carrying the slick mutation was reported in the Dairy Update Fall 2024 newsletter, there has been an increase in the number of such bulls marketed in the United States. Genetic merit has also been on the rise with the top five slick Holstein bulls based on Lifetime Net Merit (NM$) having estimated predicted transmitting abilities (PTA) of $708 to $819.

The slick mutation is a naturally occurring modification in the prolactin receptor gene that causes cattle to have unusually short hair. The mutation is a dominant trait so cattle that inherit even one copy of the mutation have a sleek hair coat. These animals are more resistant to heat stress than typical Holsteins, probably because the short hair coat allows them to better control body temperature during heat stress.

Most slick Holstein bulls whose semen is available today are heterozygous for the slick mutation. In other words, the bull has one copy of the slick mutation and one copy of the normal prolactin receptor gene. When mated to non-slick females, half of the offspring will be slick and half will have normal hair length. Now, however, semen from a few homozygous slick Holstein bulls is being marketed. All their offspring will inherit a copy of the slick mutation and should exhibit short hair.

The following table details slick Holstein bulls whose semen is currently commercially available. The PTAs for NM$, total performance index (TPI) and milk yield (PTAM) are based on the April 2026 genetic evaluation. Contact the relevant organization for more information.

For more information about slick genetics, contact Pete Hansen at pjhansen@ufl.edu

Gator-Slick Fresco (pictured) is a bull calf at the UF/IFAS Dairy Unit carrying the slick mutation. The Dairy Unit is home to 25 slick animals.

Slick Holstein bulls currently being marketed in the United States as sorted by NM$

Bull	NAAB Code	Bull stud	Slick genotype	NM$	TPI	PTAM	Beta casein
Caruthers-S	9HO17970	Select Sires	Heterozygous	819	3260	1292	A2A2
Marc A Sl	551HO06575	ST Genetics	Heterozygous	787	3110	1056	A2A2
Woz-S	9HO17969	Select Sires	Heterozygous	784	3267	756	A2A2
Goldy Gopher-S	9HO17983	Select Sires	Heterozygous	780	3217	602	A2A2
Novice-S	9HO18145	Select Sires	Heterozygous	708	3224	-80	A2A2
Vicolleto-SS	9HO18007	Select Sires	Homozygous	631	2993	882	A2A2
Roebuck-Slc	551HO06571	ST Genetics	Heterozygous	622	3022	936	A2A2
Ice Cube-S	9HO16849	Select Sires	Heterozygous	616	3101	1106	A2A2
Jens-P-S[a]	9HO18011	Select Sires	Heterozygous	595	3058	1259	A2A2
Chip-slick	542HO10111	Global Ag Alliance	Heterozygous	589	2953	-291	A2A2
Slickwilly	551HO06455	ST Genetics	Heterozygous	583	2923	223	A2A2
Jokic-Sl	551HO05867	ST Genetics	Heterozygous	582	2898	1288	A1A2
Roland-Slc	551HO06570	ST Genetics	Heterozygous	579	3028	652	A1A2
Eze-S	9HO17356	Select Sires	Heterozygous	559	3062	461	A2A2
Glowstick-S	9HO17743	Select Sires	Heterozygous	547	3043	60	A2A2
Cool Brad-S-ET	741HO12503	Tropical Resilience Genetics	Heterozygous	533	2898	573	A1A2
Irvin-Slick	029HO22101	ABS	Heterozygous	523	3046	472	A2A2
Dad Sl	551HO06573	ST Genetics	Heterozygous	519	2855	721	A2A2
Sennet-Slick	029HO21953	ABS	Heterozygous	480	2941	279	A2A2
Slickdude-Sl	551HO04839	ST Genetics	Heterozygous	474	2830	-115	A2A2
Subee-Slh	551HO06569	ST Genetics	Homozygous	450	2860	-304	A2A2
FIT PA-MA FAT MOVER-SL-P-ET[a]	741HO12504	Tropical Resilience Genetics	Heterozygous	444	2895	695	A2A2
Fondy-Slh	551HO06473	ST Genetics	Homozygous	404	2846	-171	A2A2
Cooloff-Slick	029HO21302	ABS	Heterozygous	368	2698	-110	A2A2
Badb Sl	551HO06574	ST Genetics	Heterozygous	354	2743	-338	A2A2
Slick Pro-Sl	551HO04837	ST Genetics	Heterozygous	349	2629	-139	A1A1
BOMAZ FIT COOL_P-SL-RED-ET[c]	741HO12502	Tropical Resilience Genetics	Heterozygous	303	2696	203	A1A2
Sedona	9HO15352	Select Sires	Heterozygous	263	2451	-753	A1A2
Nippy SL P*RC[b]	097HO42791	CRV	Heterozygous	237	2649	471	A1A2
Lz-Sl	551HO04838	ST Genetics	Heterozygous	195	2502	-564	A2A2
Jose-Sl	551HO04261	ST Genetics	Heterozygous	167	2443	-778	A1A2
Slick-Gator Lone Ranger	047HO01029	Bovine Elite	Heterozygous	151	2370	-960	A1A2
Rolly	551HO04260	ST Genetics	Heterozygous	144	2415	-1001	A2A2
Polar SL PP[c]	097HO42790	CRV	Heterozygous	-57	2295	-228	A1A2
Blanco-Sl	551HO03574	ST Genetics	Heterozygous	-163	2172	-804	A1A2

[a] Polled
[b] Polled, red carrier
[c] Polled, red

Dairy Update is published quarterly by the Department of Animal Sciences, Institute of Food and Agricultural Sciences, University of Florida. Please address any comments to Albert De Vries, Editor, Dairy Update, PO Box 110910, Gainesville, FL 32611-0910. Phone: (352) 294-6983. E-mail: devries@ufl.edu.
The opinions expressed in this newsletter are those of the authors and do not necessarily reflect the view of the University of Florida.
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