

# CREAM “MOOS” LETTER

*March 2017*

## IN THIS ISSUE...

- CREAM Updates
- Life of a Fairchild Dairy calf
- Little Royal Livestock Show
- All About Genomics
- And more!



# Cross-Country CREAMing

## By: Bailey Basiel

Three CREAM members and six other UNH dairy students attended the 2017 Winter Dairy Travel Course over winter break with students from UConn, UMaine, and UMass. Students travelled across Pennsylvania and toured a diverse selection of farms across the state in addition to touring a meat processing facility. Students visited Mason Dixon Farm in Gettysburg. This large farm milks part of their herd with robotic units and the other part in a parallel parlor. The farm also has a manure digester which takes methane gas from manure and converts it to useable energy which powers the farm.

Gay Rogers Farm milks only about 25 registered Ayrshires. These animals are bred for type and are housed and milked in a tie stall. They rotationally graze throughout the spring and summer months. Rogers supplements the farm's income with a summer "Farm Camp" which teaches girls from communities where agriculture is not prevalent about dairy farming.



Kulp Farm is a large, family-run farm that houses animals on three separate properties. The farm has a rabbi that lives on-site to inspect and bless their milk, making it kosher. This milk is sold for a higher price per hundredweight.

The Cargill Meat Processing Plant is a unique slaughterhouse in that its equipment is large enough to accommodate cull cows of various sizes. Many processing plants can only accommodate uniform sized beef steers. Students saw an aspect of the dairy industry that they would not be able to experience at their universities.

The CREAMers that attended this trip got a well-rounded perspective of dairies across the state of Pennsylvania. The Winter Travel Course allowed student in CREAM to experience dairy farms that are operated differently than Fairchild Dairy.



## THE LIFE OF A FAIRCHILD CALF

BY: CASSIDY MAUGERI, VIVIEN BURNELL,  
ASHLEY AZAROWSKI

When a pregnant cow is close to her expected due date, she is moved from the dry barn to our maternity pens. She normally spends 4-6 days in maternity before she gives birth, but when she does there's almost always someone waiting for her calf to arrive.

After the calf arrives, it is left in the stall around 1-2 hours before it is moved to its very own stall in the nursery. There, within its first few hours of life, it receives its first vaccines, its naval is dipped, and drinks its very first colostrum.

Welcomed by warm shavings, she is monitored diligently for 24 hours making sure her first and second colostrum are fully consumed. Upon the announcement of her arrival, the respective CREAMer, research worker, or farm staff member that has watched over her mother names her. For example, when Chipotle gave birth to her calf, Cassidy named her Guac!

The calf is also watched for healthy movement and mobility, such as standing on all four legs. After her/his first 24 hours of life, the calf is fed grain, given clean water, and administered a bottle of milk replacer twice a day. The calves are cared after by the CREAM class, who clean out their stalls and give them fresh shavings every 12 hours.

The duration of time spent in their calf stalls depends upon the sex of the calf. Bulls remain at the barn for about a week before they are sold, unless they are being used for research. Heifers stay in their calf stalls until they are at a healthy weight and have fully transitioned to a total mixed ration (TMR). At this point in time, calves are ready to graduate to their super-hutches. In the super-hutches, they are paired with one or two other calves with similar body weights. Once a calf is no longer considered a calf, she is then moved to the heifer barn, where she lives in a pack setting. This is where Guac currently resides today!



## Genomics and Dairy Cattle Breeding

By: Courtney LeCuyer

Genomics is the branch of molecular biology concerned with the structure, function, evolution, and mapping of genomes. Genomic data is used for a wide variety of purposes including gene therapy, identifying diseases, and livestock breeding. In dairy cattle, genomic data is used to make corrective mating decisions, select genetically superior animals, and predict phenotypes. Genomic testing became prevalent in the dairy industry starting in 2009. Today, genomic data is combined with genotype, phenotype, and pedigree data



to provide the most information possible about an animal. At UNH, genomic data is utilized when bulls are selected for artificial insemination (AI) of our cows. Bull proofs provide information about the traits and predicted transmitting ability, or chance that an offspring will inherit a certain trait from a parent, of a specific bull. Bulls are progeny tested to provide information about their daughter's observed traits so that farmers can choose bulls with specific traits or genetic superiority. Genomic data adds additional information about the genetic merits of a bull than just progeny testing alone. Some bulls have no information provided about their daughters and only have genomic data. While genomic data is usually very reliable it is still only a prediction based on genetic analysis. Bulls that have been progeny tested as well as have genomic data are going to be more reliable in their transmitting ability of traits than bulls that have only had genomic testing. That being said, genomic bulls still have an important place in dairy breeding. Farmers tend to use AI bulls that have progeny testing and superior genetic merit resulting in the widespread use of only a few select bulls. This dramatically increased inbreeding rates of dairy cattle. Genomic testing on young bulls allowed more bulls to be kept based on genetic merit which increased the number of superior AI bulls available for purchase. As a result, inbreeding went down due to the flooding of the market with new bulls.



If you would like to support our class, please consider our fundraising shirt this year! It is a long sleeve maroon, cotton shirt, with a stylish cow-themed saying!

Please speak to Shelby Jaffe or email the CREAM class at [unhcream@gmail.com](mailto:unhcream@gmail.com)!

## What's new in the CREAM class?

- WE WILL BE HAVING OUR CREAM BANQUET IN EARLY MAY TO CELEBRATE A GREAT YEAR FOR THE 2016-2017 CREAM CLASS!
- LITTLE ROYAL LIVESTOCK SHOW IS ON MARCH 25, 2017.
- HENRIETTA AND BRUSCHI HAD TWINS!
- RECRUITING OUR NEW MEMBERS FOR THE 2017-2018 YEAR!



PLEASE JOIN US!  
UNH CREAM WILL BE HAVING A  
COMMUNITY BENEFIT AT 7TH  
SETTLEMENT BREWERY IN DOVER!

APRIL 9TH 2-9 PM

CREAM is a student run program at UNH  
where students care for and run a herd  
of 25 milking Holstein cows. The milk we  
produce is on the tables of thousands of  
homes across New England!

*7th*  
Settlement

HANDCRAFTED  
BEER AND FOOD

don't buy  
beer from  
strangers™

Please join us for  
our fundraiser at  
7<sup>th</sup> settlement  
brewery in Dover,  
NH on April 9<sup>th</sup>! 5%  
of all proceeds  
from 2PM-9PM will  
directly benefit the  
CREAM class!



# DILL AND I

BY: ARIANA GOUGH

It was back in my freshman year that I first met Dill; I remember it like it was yesterday. I took Drew's Dairy Selection class spring semester, and she was my assigned heifer for little Royal. Now, keep in mind I have never touched a cow until I met Dill. I remember thinking she was the greatest thing ever; she's sassy, loving, snuggly, big, cute, perfect for me! I would take a million pictures of her for

Snapchat, even my parents were obsessed and were requesting updates on her. I could not wait to get to the barn every day just to give her bagels and take her out on walks. Zoom on over to two years later, and she's now my CREAM cow! I actually spent the summer at the barn and was there when she had her first calf (which was also my first calving that I took part in). Her calving wasn't an easy one, we



had to pull the monster that is her daughter Relish out and it was about a 2 hour process late at night. I've learned a lot from Dill, from how to handle large animals, how to pull calves, how to administer oxytocin, to working on my own patience and caring. Dill has a special place in my heart; she's the reason I decided to work at Fairchild (and now live there). I look forward to what the future holds for us!

Little Royal Livestock Show  
By: Victoria Ashley

On Saturday, March 25, 2017, current CREAMERS, as well as COLSA students from several other equine, dairy, and animal science classes will participate in the Little Royal Livestock Show. A project horse or heifer is assigned to each student, where they have only a few weeks to train their animal in-hand before the show. They are also responsible for clipping, bathing, and (for horses) braiding their animal. Students are assigned to their show class based on any previous show and animal experience. After competing in their individual classes, the first and second place winners from each class compete for overall Equine Champion and Dairy Champion. The winner of each will then show against each other for the overall Champion title of the day, in which they will compete and show the animal that they didn't show (i.e. a dairy student will show a horse, and vice versa). A mystery animal is also sometimes shown as a final judging factor.

The participating CREAMERS from the 2016-2017 class and their assigned heifers are:

Victoria Ashley	#868 Coolatta
Hannah Mullen	#862 Canola
Alex Tongs	#880 Blossom
Rachel Moore	#879 Yue
Madison Prindle	#881 Sriracha
Angelique Foley	#878 Bambi
Isaac Traynor	#858 Isa

The Little Royal Livestock show will be held in the W.C. Skoglund indoor riding arena at the UNH horse barn, and it is free for anyone interested in coming to cheer on the participants! Equine students show in the morning and dairy students show in the afternoon. We hope to see you there!

