

SPRING EDITION

the Moo's Letter

CREAM 2017-2018



Farmer Panel

By Elise McDonough

Our farmer panel was made up of an array of five local dairy farmers, namely Jay Pritchard of Pritchard Heifer Farm in Pembroke, John Fernald of Fernald's Farm Dairy in Nottingham, Amy Matarozzo a UNH graduate, Ryan Courtright of the UNH Organic in Lee, and Si Robertson of Bohanan Farm in Contoocook. The panel shared what led them to the dairy industry, as well as the ups and downs that go with it. For John Fernald and Si Robertson, their families have been involved in the dairy industry for generations. In stark contrast, Jay Pritchard and Amy Mararozzo started their farms at young ages and have worked hard to establish their businesses in the last few years. Ryan Courtright grew up in the industry down in Pennsylvania, but moved up here and took over the UNH Organic recently.

The panel was diverse in more than just backgrounds. For instance, the herd sizes ranged from a couple hundred to under 10 cows. Even with the diversity, the panel agreed that a clear universal struggle in the industry is the low milk price. Luckily, they all had reasons to stick with the industry through thick and thin. Jay explained that it was very rewarding to see hard work pay off and to know all his heifers by name. Likewise, Amy and Ryan shared how important it is to them to give their kids the chance to grow up in agriculture like they did. Si also emphasized how the industry for him is a family one, with his parents and his brothers all involved. We were very appreciative of all the panel members for coming to our class and taking time out of their very busy schedules, which CREAM has taught all of us how busy a dairy can be.

Note from the Editor

Welcome back from winter break! All of the CREAMers can agree that it is great to be back in the barn with the cows, and looking forward to completely our last semester of CREAM. Some of our goals for the rest of this semester is to continue learning more about the dairy industry, as well as developing ways to deal with the challenging milk prices currently facing the industry. Enjoy this newsletter that looks at more of what we do in and out of CREAM.

- Jess Childs

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Jay Pritchard, John Fernald, Si Robertson, Brian Matarozzo, and Ryan Courtright with the CREAM class

CREAMer Biographies

Alissa Scinto



I'm Alissa, and I am a senior, Animal Science major from Shelton, CT. Growing up I was a horse person, but my time in Dairy Club and working at the Fairchild Dairy have shown me how awesome cows are. I was interested in taking CREAM because of my goal of going to veterinary school, but learning how to manage a herd has been one of the highlights of my senior year. In between research, barn chores, and classes, I enjoy sleeping, visiting Geneva (pictured) reading, playing video games, watching Parks and Recreation or The Winter Soldier, and hanging out with Pebbles, my cat.

Yianna Rhodes

I am a Senior in the Animal Science major and I am from Portsmouth NH. Outside of CREAM, I love riding horses, gardening, and reading. Pucker 776 is my CREAM cow although she was on study for about half the semester so Viola was her stand in. UNH's Animal Science department as a whole had gotten me interested in the dairy industry since many of my favorite classes as an underclassman were dairy based. One of my favorite things about cows is their unique personality; for instance, Pucker is a complete model citizen of the barn, you don't have to ask her twice for anything. Viola on the other hand can often be caught getting happily distracted by sparkly things, but that's what makes her so lovable. After graduation, I am taking a gap year between my undergrad and graduate school, eventually hoping to dive into the dairy sciences world of research for a masters degree.



Evelyn Solis



My name is Evelyn Solis and I am a Junior Animal Science major from Waltham, Massachusetts. I'm taking CREAM because I can't get enough of those lovely ladies. Before college, I barely knew what a cow was. My love for them has grown immensely during my time here at UNH. As if I don't already spend enough time with the girls for CREAM, I also work research shifts and will be living at the barn for my senior year. My cow is Callie Mae ♡. She's a bit of a troublemaker, but I love her for it. I'm super excited for her to calve at the end of the school year. If it's a heifer, her name will be Anna Mae!

CREAMer Biographies

Miguel Catala

I am a senior Biomedical Science PreVet major with a minor in Wildlife Conservation and Biology from Brentwood NH. I was first introduced to the dairy industry my junior year of high school where I learned dairy judging and showmanship. After my exposure with dairy cattle I knew I wanted to learn more and I am glad I have the opportunity to do so through CREAM. Some of my hobbies outside of CREAM include hiking, camping and spending time with my dog. After graduation I hope to gain more experience in the veterinary field and eventually apply to vet school.



Brianna Wason

I am currently finishing my senior year at UNH as an Animal Science major. Originally from Sutton, MA where ironically the town flag has an apple and a cow on it, I grew up outside of the agricultural life mostly playing soccer. It was on my 11th birthday, when my Dad rescued three one-month-old kittens that I knew I wanted to become a veterinarian. I also grew up riding horses and spending time with the wild horses on Assateague island (even though I wasn't supposed to!) Now at UNH, I have had countless opportunities to learn and grow in the animal science field. I enjoy CREAM and everyday learning from my advisors, barn staff, and peers about the details of running our dairy farm. Aside from classes, most of my time is spent either at the barn, the gym, or Stratham Newfields Veterinary Hospital where I also work as a veterinarian assistant.



Kira Kenny

I'm a Senior, Zoology major from Bridgewater, NH. Playing with my dog Beast is one of my favorite hobbies. Kanga, one of our red Holsteins, is my CREAM cow! Since I have not had any experience with cows, and I really wanted to become exposed to them, CREAM was the perfect opportunity. I was interested in how the dairy industry ran, and wanted to learn more about milk production and how to care for cows. So far, I have been learning a lot, and loving every moment of it! The thing I love most about cows is their personalities! They each have their own attitudes and remind me of giant dogs. After graduation I want to pursue a degree in veterinary medicine focusing on wildlife and exotics.



Herd Health with Dr. Elder

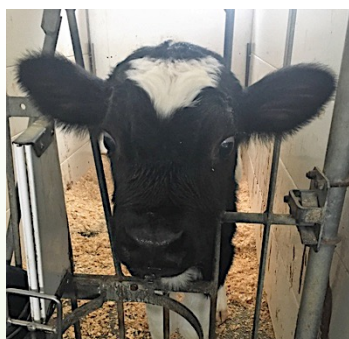
By John Decker

The University of New Hampshire's resident large animal veterinarian, Doctor Dean Elder, treated preVet students and aspiring farmers alike to a guest lecture in December. With Jenga as our demonstration cow, Doctor Elder went through his step-by-step process of assessing the health of an animal. Surprisingly, the first thing Dr. Elder suggested to focus on had nothing to do with an individual animal, but he said that the management by its owners determines every cow's health. If there is going to be a recurring problem, then it is unlikely the fault of the animal's, but has to do with the people feeding her, milking her, taking care of her and especially her bedding. After assessing living conditions, it is time to focus on the individual cow. While Dr. Elder had plenty of fancy gadgets at his disposal, he brought only his stethoscope and his senses. Throughout his lecture, Dr. Elder stressed to us just how much your sight, smell, touch and hearing can tell you about the health of an animal. It does not take equipment to see if a cow is tense from pain or dehydrated nor does it take equipment to smell if a cow's stool is off or if their breath is sweet indicating a metabolic issue. By knowing what is normal, he is able to tell what looks, smells, feels, or sounds wrong in an animal. Amongst his routine was a valuable

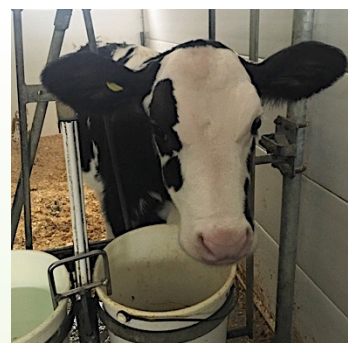


Dr. Elder demonstrating auscultation on Jenga, 756

lesson for why physics is required for medical school: oscillations. Doctor Elder talked at length about “pinging” a cow to listen for irregular noises. Using a stethoscope and flicking the cow along its gastrointestinal tract you are able to listen for gas or liquids trapped somewhere they should not be. As sounds are distorted by what they travel through, it can inform Doctor Elder on what is inside. Here again he demonstrated the importance of knowing the difference between what is normal to hear and what is abnormal. The entire class would like to thank Doctor Elder for the fantastic lecture and the valuable lessons he gave that night.



Skunk



Queso

Born: February 8, 2018
 Dam: Owl-891
 CREAMer: Haley
 Osgood

Born: January 9, 2018
 Dam: Chipotle-660
 CREAMer: Matt
 Boudreau

Calf Corner

With Kira Kenny

Welcome to Calf Corner, where the new calves of CREAM are introduced! In this edition we are featuring our two newest calves, Queso and Skunk!

CREAM at NESAs

By Jessie Sexton

The weekend of February 23-25th, UNH Dairy Club took the trek down to Rutgers University in New Brunswick, New Jersey to compete at the annual Northeastern Student Affiliate (NESAs) competition. We participated in livestock judging, quiz bowl and paper presentations. At the event, we judged classes of cross-bred market hogs, aged Holsteins, Angus yearling heifers, cross-bred feeder lambs, and American saddlebred horses as well as a surprise class of Jersey Giant chickens. UNH did very well compared to years past, placing the highest we have in years, fourth place! Or so we thought... After the scores were recounted, Rutgers realized their mistakes and regretted to inform us that UNH was actually seventh place overall, after awarding us the 4th place ribbon at the banquet. Despite the overall team placing, individuals still placed very well. Former CREAMer and one of this years CREAM advisors, Isaac Traynor, placed 4th individually in livestock judging out of 164 people judging. Team A, comprised of present CREAMers, Alissa Scinto,



CREAMers and Dairy Club members at the NESAs Banquet

Bram Robertson, and Bailey Veilleux as well as former CREAMer and advisor, Bailey Basiel, placed as the 9th overall judging team out of 41 teams. Almost all of the UNH quiz bowl teams advanced through at least one round, if not two and all of the paper presenters received high grades from the judges, especially CREAMer Annie Ciampaglia with her presentation on Chronic Wasting Disease. Overall, Dairy Club learned a lot and had a lot of fun, making new friends and watching CREAMer Evelyn Solis shred it up solo on the dance floor in front of the entire banquet.

AI Course

By Haley Osgood

Over the J-Term, many CREAMers participated in a two-day AI training course taught by Ivor Jones of Select Sires. Ivor was an excellent teacher with multiple jokes up his sleeve. On the first day, we watched a few basic videos describing the anatomy and the general procedure of artificial insemination. After the videos, we moved on to the vaginal tracts taken from cows that had, as Ivor put it, 'made the transition from dairy cows to beef cows.' We practiced moving the cervix over the AI gun, and after many successful attempts here, many of us thought that practicing on a live cow would be just as easy. After having my hand in a cow's rectum for longer than she probably wanted, I realized that locating the cervix was much harder when it was inside the cow rather than lying flat on a table. Just as soon as I'd find the cervix of the cow, my arm would become so tired I could barely get my fingers to grab the cervix. Many of us left the first day somewhat defeated. Ivor told us we'd be thinking about the process overnight and would be more successful tomorrow.

The second day of the course began with



CREAMers Alissa and Haley practicing their AI skills.

more videos. After, we practiced pulling semen straws out of the holding tanks and loading the AI gun. We headed back out to the cows to see if we would be able to get the gun threaded through the cervix. This time I had a much easier time locating the cervix inside of the cows. I was able to get the gun all the way through the first ring of the cervix, but not the second and third. I tried many times that day, but I could not get any further. I still considered this a success as I got much further than I had the first day. Some of the CREAMers were able to get all the way through the cervix and inseminate the cows!

All in all, everyone in the class learned a lot, and was able to experience something they had not before. It was an experience I am ready to try again!

Research at Fairchild

By Bailey Veilleux

Our CREAM program takes place at the Fairchild Dairy Teaching and Research Center. This barn is home to nearly 90 milking Holsteins, around 20 of which are CREAM cows, as well as a large number of replacement heifers. Here, we are able to represent a typical New England style dairy farm, while also conducting valuable research with our herd.

Most of the research done at our barn is devoted primarily to dairy nutrition. From newborn calves to aged milking cows, many studies involving the nutrition and diet of our herd take place here.

A few of the many different research projects that have been done at Fairchild Dairy include those related to alternative feeds for dairy cows, and bioavailability of certain amino acids. Having a tie-stall set up means that different cows can be fed different diets in their own personal feed bin, and the effects of that particular diet can be better studied and understood.

Studies involving our growing heifers have also helped us to better understand the importance of



Some of the heifers using their electronic feeding doors.

proper nutrition from the start. One of the ways we are able to do this is by using special electronic doors for feeding our study calves. These doors are triggered from a collar worn by the heifers, and will only open if the right heifer comes to eat from it.

The research conducted here develops new knowledge and management systems focused on improving animal health, as well as the overall profitability of the dairy industry. The Fairchild Dairy Teaching and Research Center allows many different people to work together and become involved with dairy cow research. From undergrads and student workers, to graduate students and PhD professors, anyone with a passion for research and animal health can find a project to work on here.

Winter Travel Course

By Yianna Rhodes

Three schools, eleven farms, one creamery, one research institute, and one retailer. In five days a charter bus full of students from the University of New Hampshire, the University of Maine, and the University of Massachusetts traveled to Vermont for a whirlwind dairy tour.

The trip was partially funded by the Northeast AgEnhancement Program of Northeast Farm Credit, which allowed low lab fees and more participation. Vermont's diverse farms gave students glimpses of all types of dairy's and operations. From a conventional farm milking 1400 Holsteins with multiple pilot operations, to a small non-GMO farm milking 24 registered Jersey's in a tie-stall barn. Those experiences coupled with visits to the St. Albans Co-Op Creamery and a fun tour of the Ben & Jerry's production facility allowed students to follow dairy production from farm to consumer. Students learned the hardships of flood land property, land



The UNH students that attended the travel course

competition, and cash flow from the farmers themselves. Trips to Borderview Genetics and the Miner Institute showed the genetics and research that supplement the dairy industry as well. Although the near future of the dairy industry looks grim, many farmers said they still aim to grow and fight through projected milk prices. Overall, the trip was, as always, an amazing educational opportunity.

What We Do Outside of CREAM

By Kristina Lotz

When not at the Fairchild Dairy barn, many of us are gaining hands on experience on farms outside of the University. I have been working with Old Orchard Farm in Madbury, NH, now for about two years. Old Orchard Farm is a family farm that offers a diverse range of agricultural products, which include pastureraised pork, pasture raised turkeys, and grass fed lambs. But that's not all; in the winter they are producing their very own syrup in their sugar shack as well as boarding 6 horses year round.

Old Orchard Farm has been passed down through nine families. I have had the pleasure of working with two of the recent families. The summer of 2016 I worked with Gray and Kitty Cornwell. This was my very first farm job. During that summer, I learned the importance of water and conservation of water due to the drought. When working for the Cornwells I also helped with their fencing business. Every other week we adventured to other farms to install electric or non-electric fencing for farms. At the Old Orchard Farm, I did everyday maintenance and checks on the electric fence. That year I learned how to raise about 200 turkeys, 10 heritage pigs, and about 60 Katahdin lambs and 30 adult sheep for production.

The next summer I was asked to come back to work and help teach the new owner's of Old Orchard Farm. The farm is now owned by Brain and Shawna Godbout. The Godbout family was very new to farming, but eager to learn when I met them. With the farm, they inherited all the Katahdin sheep. I worked mostly with Shawna over the summer and we were able to make a lot of changes on the farm early on. We enlarged the indoor turkey facility to give each individual more space. We also got to work relocating the pigs to a better location on the farm. Just about every week we worked together and I taught her about the electric fencing on the farm. During the early stages we had a few escape artists who learned how to get out and back into the fenced area; until we caught them in the act.

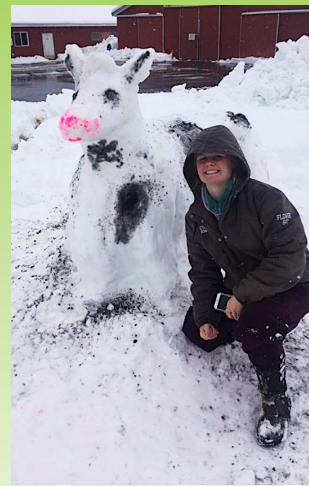
From the start of the summer we noticed that the sheep had low condition scores and very loose



Tina weighing one of the new lambs

stools. We learned that most of the sheep had a parasite called threadworm, a member of the roundworm family. After we learned this, the Godbouts were focused on parasite treatment and prevention. In addition, we began having sheep school every Wednesday with Dorothy Perkins, a member of extension, to help us better understand how to raise sheep. We started the deworming process with the sheep, which required us all to learn more about handling. We learned how to get our own fecal egg count. At first it wasn't easy and we made many mistakes, but by the end of the summer we felt like sheep experts. We even hosted a sheep workshop for other farms.

Starting at the very beginning of January we began the lambing process; we now have a total of 86 cute little lambs. I stop over to help with vitamin injections and putting on ear tags. It was mostly a smooth process with the help from the vet, extension and my professor, Dr. Pete Erickson. We did have a few complicated births and bad mothers. It was a crazy two months, but it is finally starting to slow down. For now we are starting to prepare for next summer.



Left: CREAMers Bram, Bailey, and Evelyn during the past snow storm. Left Center: CREAMer Evelyn using the Jaylor to feed the herd in the snow. Right Center: CREAMer Jessie with a "snowcow". Right: CREAMer Felicia emptying a wheelbarrow of manure. Photos from Alex Tongs, Alissa Scinto, and Evelyn Solis

While the calendar might say spring is coming, the weather clearly disagrees. However, CREAM will go on in spite of the snow.

Former CREAMer Spotlight

By Miguel Catala

From not knowing what a dry cow is to now being a dairy nutritionist, former CREAMer Nicole Guindon's unique experience demonstrates how you never really know where the future will take you. Nicole started off her UNH career with the aspiration of becoming a horse trainer however she realized that it wasn't the field for her. She decided to switch into the Pre-vet program where she was exposed to the dairy industry for the first time. She then got into the 2009-2010 CREAM class which was the largest class consisting of 34 CREAMers!

Through her experiences with CREAM she fell in love with the dairy industry and decided that vet school wasn't her calling either. Post-graduation, Nicole decided to remain at UNH to get a masters degree in Dairy Nutrition under the advisement of Dr. Pete Erikson. During her masters she remained involved in CREAM as a teaching assistant for two years.

Nicole also managed the UNH organic Dairy Farm where she got to experience the farmer lifestyle.

She struggled at first as the dairy industry was still a new world for her and she had to figure it out day by day. After four years of management, she decided to take a different direction in the dairy industry and decided to become a dairy nutrition consultant for Agri-King.

Agri-king is based in Illinois and serves many farms in the west, however they only recently started expanding into the New England area. Currently, Nicole is the only Agri-King consultant where she serves farms in New Hampshire, southern Vermont and a few in Maine and Massachusetts. On average she drives 800-1000 miles a week! One of the things she loves most about this position is being able to see new farms and learn how they operate. Some of the biggest issues in nutrition that she has encountered are forage quality, transition health, and breeding.

The one thing Nicole misses about farming is her daily routine and being on the farm. However, she still gets to experience the farmer life at home with her one hundred and twenty cow farm. In the end, she gets to experience multiple roles within the dairy industry, something that she would not have guessed when she first came to UNH.