VOL. 2 ISSUE 8 · SEPTEMBER 2022

CATTLECAL NEWSLETTER

ANNOUNCEMENTS

Welcome to the CattleCal newsletter for September 2022! In this issue we have exciting information on research and activities completed this month, the career and research of Jennifer Heguy, UC Cooperative Extension dairy advisor and county director, and a look at a research paper on the use of beef semen on California dairies. If you would like to hear more detailed conversations about the articles in this issue, look for our CattleCal podcast on Spotify. Descriptions of this month's episodes and a link to the podcast can be found on page 3. If you have any questions, comments, or would like to submit a question for our Quiz Zinn segment, feel free to contact us. Our contact information can be found on the last page of the newsletter.

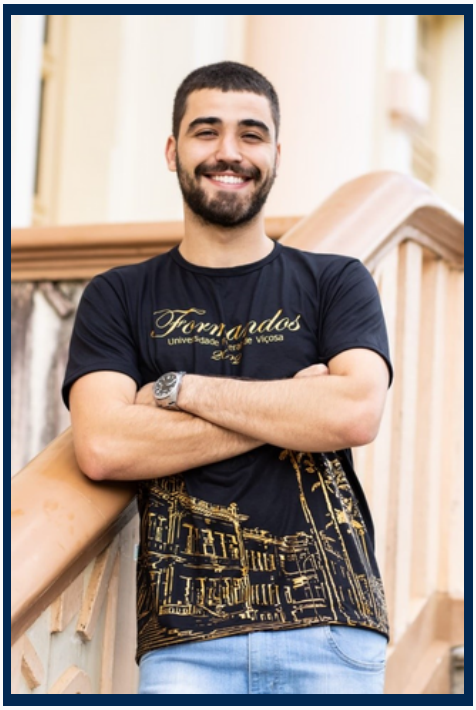
This issue:

WELCOME NEW 2022-2023 INTERNS

We are excited to welcome two new interns to our program. Get to know them below!

Chilove Theusme

I'm from Haiti and a doctoral student in agriculture science at the University Autonomous of Baja California, Mexico. I am working with non-invasive method to assess heat stress in cattle, my interest is to get knowledge especially in scientific research.



Lucas Hollerbach

I'm from Brazil. I graduated in Animal Science from the Federal University of Viçosa (UFV), Minas Gerais State, Brazil. I started working with beef cattle in my fifth period of the university, and since my sixth period, I have worked at the ruminant nutrition laboratory (LabNur). I'm excited about this new phase of my life as an exchange visitor at DREC/UC Davis.

UC CE | University of California
Agriculture and Natural Resources | Cooperative Extension

Moringa Awareness and Production Workshop

Join UC Cooperative Extension for a *FREE* workshop

Thursday, October 13, 2022
9:00 – 11:00 AM
UCCE Cooperative Extension
1050 E Holton Rd
Holtville, CA 92250

Topics Include:

- Moringa production potential in the low desert
- Moringa for human consumption
- Moringa nutrition for livestock
- Group discussion of moringa production – things that are working well, concerns, knowledge gaps, potential research

Who should attend:

- Anyone currently producing or interested in producing moringa, particularly as a livestock feed.
- Livestock operators interested in feeding moringa.
- Consultants and allied industry professionals.

PC: C Waterman, 2020

Register at: http://ucanr.edu/desertmoringa

For more information contact Brooke at (442) 265-7712 or bclatack@ucanr.edu.

UC CE | University of California
Agriculture and Natural Resources | Cooperative Extension

Moringa Awareness and Production Workshop

Thursday, October 13, 2022
9:00 – 11:00 AM

9:00 – 9:05 **Welcome**
Brooke Latack, UCCE Imperial, Riverside, and San Bernardino Counties

9:05 – 9:20 **Production potential of Moringa in the Low Desert**
Dr. *Oli Bachie, UCCE Imperial, Riverside, and San Diego Counties*

Learn about the production potential for Moringa in the low desert area.

9:20 – 10:00 **Moringa for Human Consumption**
Dr. Carrie Waterman, Assistant Professional Researcher, Institute for Global Nutrition, UC Davis

Learn about the history, uses, and benefits of Moringa as well as the cultivation, consumption, processing, and preservation for human consumption. This training is supported by a CDFA specialty crop grant.

10:00 – 10:15 **Nutritional Impact of the Feeding of Moringa to Livestock**
Brooke Latack, UCCE Imperial, Riverside, and San Bernardino Counties

Learn about the nutritional qualities of moringa for livestock compared to other commonly fed forage crops as well as potential issues and benefits of feeding moringa to livestock.

10:15 – 11:00 **Discussion**
All participants

This is a chance for all participants to discuss what has been working, challenges in production, knowledge gaps, and potential research that would help local producers. We welcome all participants to bring questions and comments that will help us move forward as we continue to develop moringa as a functional crop for Southern California both for human and livestock consumption.

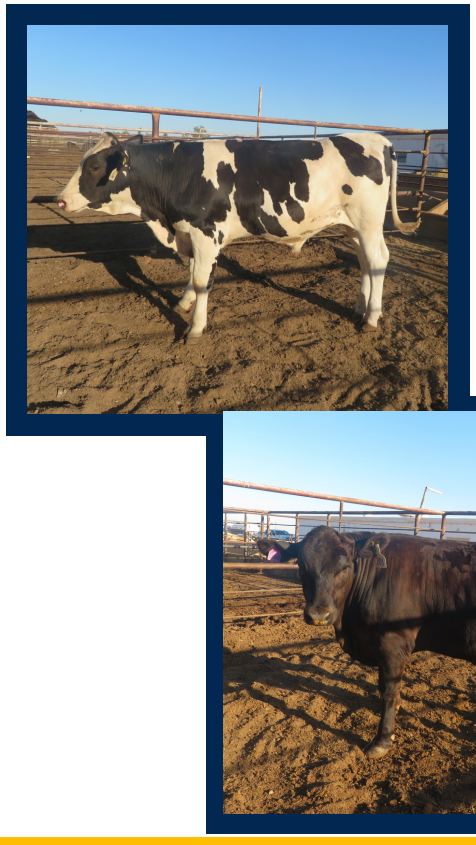
THIS MONTH IN RESEARCH

In August we continued our two projects. We had two weigh periods in August., so data below are for the 56-d feeding period. We re-implanted cattle in late August. In August, average temperature was 92.6° F (1.4° F greater than July), average maximum temperature was 105.1° F (1.1° F less than July), and average minimum temperature was 81.0° F (4° F greater than July).

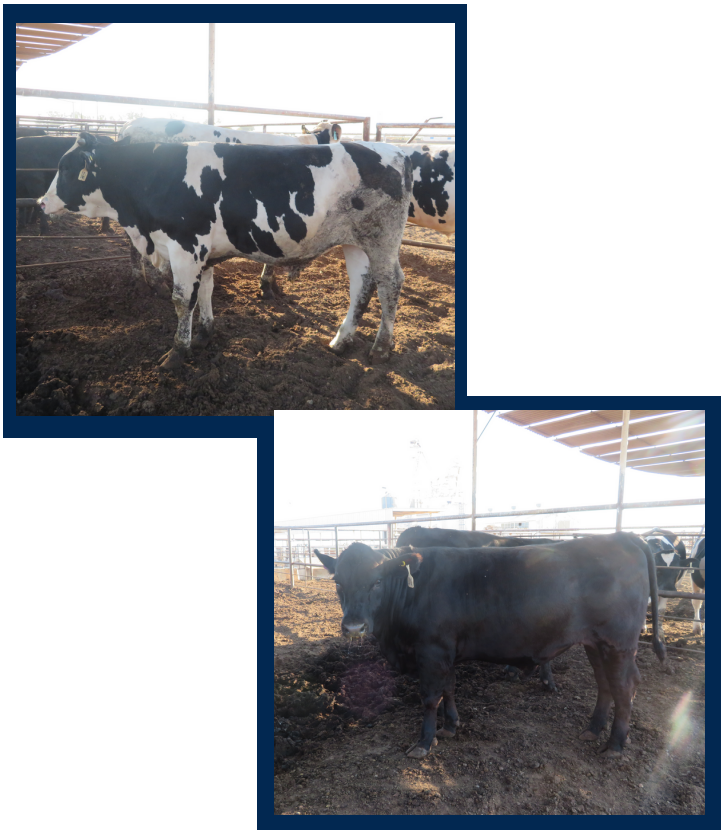
DAYS 168-224 PERFORMANCE SUMMARY

	Holstein	Crossbred
Body weight (d 168)	898 lbs	918 lbs
Body weight (d 224)	1077 lbs	1082 lbs
ADG	3.18 lbs/d	2.92 lbs/d
DMI	18.4 lbs/d	17.8 lbs/d
F:G	5.79	6.11

July 2022



August 2022



CATTLECAL PODCAST SEPTEMBER EPISODES

Career Call - CCP#068

This week Brooke Latack and Pedro Carvalho called Jennifer Heguy, University of California Cooperative Extension Dairy Advisor and County Director, to discuss her life in animal agriculture from attending cattle sales with her dad to doing applied dairy research on California dairies.

Research Call - CCP#069

This week Brooke Latack and Pedro Carvalho speak to Jennifer Heguy again to discuss her recent survey addressing the use of byproducts in rations on California dairies.

Feedlot Research Call - CCP#070

In this episode, join Pedro Carvalho and Brooke Latack as they discuss a study looking at a survey of California dairies about the use of beef semen on dairy cattle.

Quiz Zinn - CCP#071

In this episode, we asked Dr. Richard Zinn about the use of molasses in feedlot Holstein steer diets.

Listen on Spotify at this link:
https://open.spotify.com/show/6PR02gPnmTSHEgsv09ghjY?si=2zV59nGbSE2mf8DiOqZLhw

Have any questions, comments, or suggestions? Want to send in a Quiz Zinn question? Contact the creators through the below email or through their social media profiles.

- Email: cattlecalucd@gmail.com
- Website: cattlecal.sf.ucdavis.edu
- Instagram: @cattlecal

QUIZ ZINN

What are some considerations that should be taken when including molasses in a feedlot diet?

First, let's just start off with molasses itself. Because of pharmaceuticals and so forth, we have a lot of competition for molasses now, so the price of molasses is very high. Most feedlots would be limiting the amount of molasses. We need to consider some very positive aspects of molasses besides the normal consideration, which would be to give some condition to the diet so that it would hold together for a little while between the time that the feed is made and delivered into the feed bunk.

Potassium:

High energy finishing diets have almost no potassium. The grain has zero potassium. What limited amount in forage depends on forage quality. When we add molasses to the diet, we're supplying a very good source of potassium. If you don't do that, you're going to have to add that potassium. Potassium is very expensive. This is an important consideration for nutritionist about why we want to have at least some molasses in the diet in addition to the normal consideration of conditioning.

Cattle Performance:

Another aspect of molasses, which right now isn't an issue, is that when levels of molasses go up in the diet, performance goes down. There is an optimal level of molasses the diet. After that we need to be very careful. We would have to have a real good reason for adding it. What is that level? I tell people that you should never feel more than 8% molasses on a dry basis, but to be safe not more than 6% on a dry matter basis. As we increase the level of molasses above that, the energy value of the molasses doesn't diminish. Feed intake does diminish with increasing molasses content, so energy intake goes down dramatically. Research we've done here in California indicates that as you go above about 6% molasses in the diet, average daily gain will decrease about 1.7% for every percentage unit increase above 6% on a dry matter basis. There is an upper constraint on how much molasses could be fed without affecting animal performance. We need to also consider that aspect now in regards to adding molasses to the diet.

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Mixing feed into the diet:

At a lot of feedlots, if the feed is being put into a mixer truck, then it's not unusual for the molasses to be at a different location. They would add the basic ingredients and then they would go over and drive underneath where the molasses is being introduced and add that to the diet at that point. That can cause some problems. When you add molasses as the very last step in feed mixing, depending on the dustiness of the diet, what it can do is it can start to form molasses balls. When you get these molasses balls, you get some entrainment. You may have some micro ingredients that get combined with that. This could be a negative aspect. The big consideration with molasses addition is that you're adding it to add some condition to the diet besides whatever nutrient component you're considering, but when we add molasses, we need to consider the possibility that it can cause sequestering of the minor ingredients. What I recommend is that you first add the grain, the protein supplement, and your trace mineral package. Add all those things, allow that to mix a minute and then add the molasses on top of that. If we do that then the possibility for entrainment goes way down and we have a good mix. A lot of feedlots can't do that because they're using mixer trucks. They're adding all these ingredients and then they're spraying molasses on top of the mix. When they have that kind of a consideration, the molasses would be diluted. Most feedlots in the Southwest would do this anyway. It has a lot higher water content. It would be about 70% dry matter instead of 75% dry matter that you would normally have for 80 brix conventional blackstrap molasses. By doing that and then spraying that on to the mix, you could have less of a problem. Where you have cold climates, that would still be a problem because the viscosity of molasses is so high. What you can do is you can put heating coils around the molasses to delivery and that can reduce some of that viscosity. This works for us even here in the desert. During the wintertime, molasses can be very viscous, and we run into more problems with mixing during the cold time of the year. If you can get the temperature of that molasses up to around 27° C, then the viscosity goes way down. It cuts that viscosity in half. Then you're able to spray that onto the feed. If you're adding it as the last day step in the mixing, then you definitely need to dilute that down with some water.

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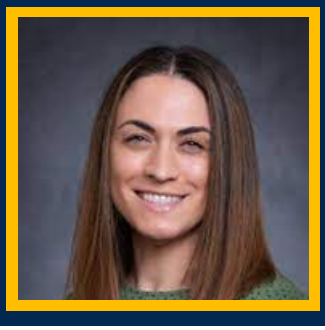
Is there any difference between the sources of the molasses (i.e. cane, sugarbeet, etc)?

As far as what you'd call conventional type molasses, there's just three types. There is beet molasses, cane molasses, and citrus molasses. Citrus would be the lowest as far as its value. The highest value would be beet molasses. The reason I say that is because beet molasses could have around 7 or 8% potassium. Cane molasses might be around 3.5-4% potassium. A lot of times the beet molasses taken up by the dairy industry so you don't see so much of it showing up in the feedlot side.

Viscosity:

The viscosity of molasses is so high. One time around Christmas time nobody was at the feedlot, and the truck came to deliver molasses. I was out in the lab doing VFA analysis at the barn lab. When the truck was delivering it I climbed up on top of the molasses tank to look down to see how high the molasses was coming as it was being pumped in. I had my checkbook in my pocket. I was getting ready to go do some shopping. My checkbook fell down. When he finished pumping the molasses in, I went back up to see if it how close we were to the top. My checkbook was still right on top of the molasses. It wasn't even dirty. It wasn't even sticky. That's how viscous that material is and you can imagine how difficult it is to get that to mix well with the diet.

CAREER CALL WITH JENNIFER HEGUY



This week we speak with Jennifer Heguy, dairy advisor for the University of California Cooperative Extension in Stanislaus, San Joaquin, and Merced Counties as well as County Director of UCCE Stanislaus county, about her education and work that led to her career in dairy extension and research.

Where are you from and what do you do?
I was born and raised in Las Banos, CA, which is just in Merced County. I did not make it very far from home. I am a dairy farm advisor, so that means I do applied research and conduct applied research on California dairy farms. I extend that research to the end users: allied industry, employees, the dairy owners. Basically, anyone who wants to listen about how we can use these results to improve practices and move the industry forward.

How did you decide to pursue a career in agriculture, specifically with cattle?
Growing up, my dad was a cattle buyer. We also had a cow calf operation on the side. The original side hustle before it was cool. I grew up in the cattle industry. I would go to sales with my dad and those types of things. We grew up in 4H. We showed animals at the fairs and transitioned into FFA in high school, continuing on with that. Like a lot of high schoolers in the valley, I thought I was going to go and become a veterinarian. That's what I was going to do. I was so sure of it. Just a piece of advice to everyone: it's always good to have a goal, but it's okay to change your mind. I actually only applied to two schools. I was the first to go to college in my family, so I was kind of flying blind. Luckily I got into UC Davis. I was an animal science major with a livestock and dairy emphasis. I did lots of internships. I interned at the vet school, I had a companion animal internship, a beef and range internship, a dairy internship with Dr. DePeters. I did a lot of things. It was in undergrad when I decided that I'm not going to vet school. I decided that I don't want to be a vet anymore. All of my family is from California. Everyone lives here. If I'm going stay in California, I probably need to make that shift to dairy cattle. Nutrition has always fascinated me, whether it's human nutrition or cattle nutrition. That's when I applied to grad school. I applied with Ed DePeters in the dairy cattle nutrition lab. For a 21-year-old, it was a very, very good decision.

You mentioned doing a lot of internships. Did you pursue those right away and how did you find them?
My advice for people is to take as many opportunities as provided. You might think on the surface that it doesn't sound like something you're interested in. I hated the companion animal one. I was not a fan. I just wasn't. It's good to know what you like. It's also good to know what you don't like. So, I crossed off companion animals and I crossed off vet school through internships. Don't say no because even an internship that you didn't enjoy is still valuable in figuring out what you do enjoy.

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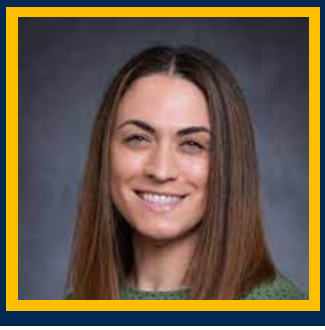
CAREER CALL WITH JENNIFER HEGUY



Were you working with Dr. DePeters before doing your master's program with him?

Dr. DePeters teaches the ruminant nutrition courses, animal feeds, and dairy science. I had him as a professor. I found him to be a very good professor and I enjoyed the field trips and the hands on applied things like doing Kjeldahl tests in the lab. It doesn't matter if we're evaluating a feed stuff for dairy cows, you can still apply it to your own life. I found dairy cattle nutrition interesting. I started interning with him when I was a junior or maybe the summer between 3rd and 4th year. That was a free internship. I was working for free just to get more experience and see if this is something I actually like. I worked with graduate students on their projects. I was out there feeding with them, bleeding cows, taking samples, running this stuff in the lab when we brought the samples back. That turned into a paid student job. I really enjoyed it. I enjoyed the lab work. I enjoyed the cow work. I approached him. At this point I was working for him, but I'm working in the lab underneath the graduate students and everybody else. I just said I'm interested in doing a master's degree. At that point I didn't know what I was going do. Coming out with a bachelor's degree there wasn't a whole lot of opportunities. Potentially in sales, but I didn't think that was the direction I wanted to go. I just approached him said, "I'm thinking about this, would you be willing to take me on?" And that was it. I think my academic and my professional life has been what I consider a series of very fortunate events. Kind of being in the right place at the right time. Things happened quicker for me than most people by 21. I knew I wanted to do a master's degree. I've been very fortunate in that regard.

Can you talk about Dr. DePeters as a mentor and the importance of mentors in your career?

One of the most valuable things I learned from Ed was that he would never ask someone to do something that he wasn't willing to do himself. This man is the hardest worker I have ever met. If you got into the lab at 6:00 AM, guess who's already there that had the coffee on. If you were staying late because you had to get some lab work ran late or something went wrong and you had to stop and you were there till 7:30 at night. Guess who was still there. There wasn't anything that he wasn't willing to be there in the trenches doing with the graduate students or with whoever. I think that was a really good example of the type of person I think we all strive to be like. He's the boss. He's bringing in the money and getting the graduate students. He's the reason why we're all here. But there was nothing that he was not willing to help out with. That's probably the best characteristic of any mentor. That feeling of we're in this together and we're working on things together. Not that top down approach.

Can you tell us about your transition from grad school to being an advisor? And a little about your current job?

After grad school I still wasn't exactly sure what I wanted to do. I stayed on with Ed in the Ruminant Nutrition Lab, working as a junior specialist. Still working with graduate students, training them on the different lab methods and helping them out and just keeping things going on the lab side and the work at the dairy. It was during that time there was an extension job open. This might be something that interests me. You research, but you're still interacting with producers and working with animals. I looked at that and I thought that sounded pretty good.

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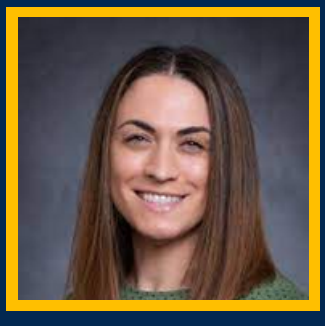
CAREER CALL WITH JENNIFER HEGUY



We had Dr. Deanne Meyer, our livestock waste management specialist, in the lab across the hall. I talked with her. The first job I applied for, I interviewed for, and I did not get it. It was down in Tulare. There's another lesson for all you kids out there: sometimes things work out for you, but you just don't know it at the time. The thought of extension was really appealing to me. You're in the counties, you're working with the farmers and farms, but you're really directing your own research program. You get to do things that interest you. I'm interested in dairy cattle nutrition. So, a lot of my projects revolve around that. I brought up feeding and looking at sorghum instead of corn in a drought and things of that nature. That was really appealing to me. Of course, I'm a dairy advisor so environmental regulation are also part of my life. I do work on that as well. But the idea of being able to direct your own program and answer questions that that are of interest to you and to the end users really interested me. At that point we knew that there were more positions opening up. It was a waiting game, so I think I was a junior specialist and just finished my second year when I started this job.

Were you at all interested in pursuing a PhD?

At that point, I was fairly certain I wanted to be a farm advisor. There was no real reason to get a PhD. Not that a PhD isn't valuable, but for me, this is the direction I wanted to go do. If it's not going to help me get the job I think I want, then it isn't helpful. Maybe if I wouldn't have gotten this job I'm in, potentially I would have taken a different path. But again, it's one of those fortunate things that I think I fell into the right spot at the right time.

Can you tell us more about your job as a farm advisor? What are some things that you had to learn quickly when you started that you weren't taught in grad school?

I would say one of the biggest challenges was also what I just said was one of the biggest draws to being an advisor: you are on your own. I showed up on day one with my lunch packed and came to my office and I didn't even have a computer. You're starting your own program. There was no one in my position for 5-7 years before me. Luckily, I came from Davis. I never left Davis since I was 18. I have the same e-mail address I had when I started at Davis. I knew a lot of people. I knew Ed DePeters. I knew Deanne Meyer. I knew the extension specialists. I knew the dairy faculty. I think that helped me tremendously. That and then doing a needs assessment with my clientele. A lot of it early on was just relying on your network not even realizing the people in your network because you've never needed a network before. That was probably one of the hardest things.

Could you tell us a little bit about some of the stuff you do on a daily basis?

The dairy industry grew pretty rapidly in California and with that the allied industry also grew. In California, you can throw a stone and hit a technical service provider. There are just tons of people and tons of allied industry working in and for dairy in California. One of the misconceptions was that I thought I was going to make lots of farm calls. People were going to call me because they had questions and I was able to troubleshoot things. I was going to be this private investigator for problems on dairies or something, but that's not the case. That's just not my reality. Early on I went to a lot of industry meetings and events and I met people. Moving forward to today, it's all based on my research. It's reaching out to farms. See if they're interested in the research.

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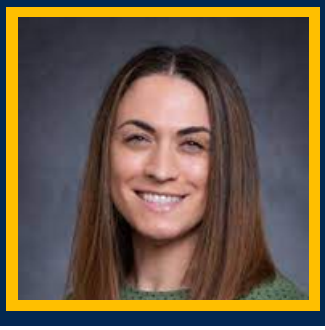
CAREER CALL WITH JENNIFER HEGUY



We do a statewide dairy conference and we see some producers there. We did a needs assessment in 2017. Overwhelmingly dairy producers said they wanted information on our research and extension programs in a newsletter format. That is how they like to get information from us. One of the biggest things I do is I am the editor of a dairy statewide newsletter. I send requests for anything and everything related or that could be related to dairy. We compile that information and we send that out to them quarterly. A lot if it is research driven. It's based on either I need a cooperator or I have these results might be of interest to folks.

Is there anything in your job that surprised you or is not your favorite part but is still an important part of your program?
That's another easy one. I'm not sure it'll be a great answer, but I honestly never saw myself, at least at this point in my career, being a county director and being on the on the admin side. I kind of assumed it would happen eventually because I know how extension works. A huge component of my time now is spent on the director side and less on the research and extension side.

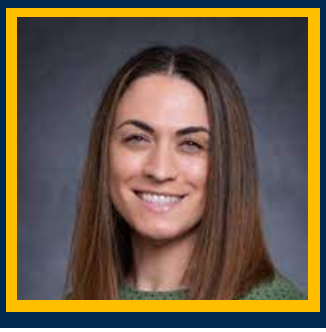
What is your favorite food?
Easy. It's French fries. All day. With eggs, with a burger, by themselves, doesn't matter. There's nothing like a good French fry.

What do you like to listen to?
Lately I have been on an Old Dominion kick. They're country, but they're all over the place. They've got some stuff that sounds like 80s country

What is something you know now that you would want to tell a younger version of yourself?
Looking back, I would probably tell myself to just slow down. Not relax, but enjoy the time. When I was an undergrad thinking about my masters, I went so quickly between them and was just so focused on wanting to get a job. I wanted to start making money, which is good. That's a good mindset to have. But then you get a job and then you have a job. So just slow down, enjoy myself more. I still had a good time but, everything is going to work out the way it should be. Work hard and you'll be fine. You don't have to be in some rush.

What is your CattleCal top tip?
I'm going to go a little stage left on this one and give an oddball answer. In our work lives we read so much, we do so much. My top tip is going to be to read a book for enjoyment. Do something that makes you happy, that you're interested in. Every time I fly, I get a book from the little convenience stores in the airport. Just some random books to read. It doesn't always have to apply to dairy or whatever your subject matter is. I forgot how much I like to read for fun.

How can people learn more about your work?
Website: https://ucanr.edu/sites/CAdairyconference/
Newsletter: https://cestanislaus.ucanr.edu/news_102/Dairy_Newsletter/



RESEARCH CALL WITH JENNIFER HEGUY

We speak to dairy advisor, Jennifer Heguy, again to learn more about her work with byproduct feeding practices in California dairies.

Could you talk to us about the project and how you came up with the idea for it?
Over the years I have been involved in a couple different byproduct projects. You do your literature review and you're looking for information and I just thought for as many byproducts as we've been feeding in California, we really don't have good numbers over a large amount of animals in this state. There are pros and cons to doing surveys, but they really are a really good, quick way to assess an industry as a whole versus making inferences from data points collected in different spots. I wanted to be able to actually better quantify byproduct usage in California. It's a great sustainability story for a lot of reasons.

What were some of the things you found in your survey as far as the type of byproducts being used? Did anything surprise you?
To do this survey, I surveyed nutritionists. I asked dairy cattle nutritionist because they are the quickest way to make those dairy count numbers increase. Some nutritionists advise for just a couple dairies and then you've got others advising for 50-60 dairies in this state. I went to the dairy cattle nutritionists to ask these questions. California is a very big state and we've got very distinct regions. You've got the San Joaquin valley where I am, which about 90% of the milk is produced in. Then you've got your north, your coast, and then Southern California. Very diverse, different systems throughout the state. I don't know that I was surprised due to this diversity. From the responses there are some people who keep very little byproduct in their rations, which makes sense if you're in a remote location and you're not getting the byproducts that we are in the valley. The valley produces so many different commodities, so byproducts are more prevalent. You have the dairies really pushing the limits of what we thought was possible and what we thought was normal for byproduct feeding. I don't know if it was surprising, but it was interesting to see the variation of feeding strategy throughout this state, which makes sense based on geographic location of dairies.

Are there any specific byproducts you saw used more often?
Even from a previous byproduct survey that I did with nutritionists, almond hulls are the predominant byproduct. Almost everyone feeds almond hulls. Not everybody, but we feed a lot of almond hulls. Which makes sense. We grow a lot of almonds in California. I think almond hulls are probably the king of byproducts at the moment.

Did the nutritionists comment on issues they had to think about when feeding byproducts, like availability or price?
We had that question. It was a multiple choice, so some of the options were price. Byproducts are cheap. We also have value. The byproducts are worth their price. Price and value are two different topics. Sometimes we might get them confused. Availability was one. The byproduct is there so they use them.

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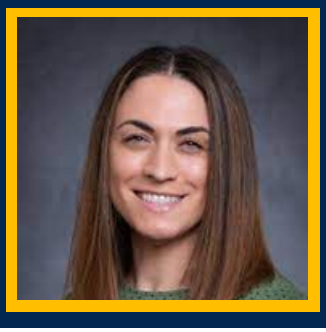

RESEARCH CALL WITH JENNIFER HEGUY

So we have that information, I don't have it on the top of my head what the specific selections were. We're just wrapping up the survey part of this project and we're going to move into some dairy audits. We're going to visit some dairy farms that are feeding those really high levels (i.e 60-80%) byproducts in their ration. We're going to visit them and look at their production and their reproduction and their feeding levels. Unfortunately, I don't have all the results of the survey completed on the tip of my tongue. The benefit of using the byproducts is that upcycling of these new byproducts into milk and beef. Another component is right now, we're in a drought. Feeding these byproducts as replacements of other things. Another question that's in the survey was what their top byproducts for replacing forages were and what are their top byproducts for replacing concentrates. There were some rail issues where concentrates weren't coming in from out of state. How people could potentially replace concentrate with byproduct is important. If we can't grow corn silage or as much corn silage, some of those questions of how byproducts can fit into different feeding schemes are going to be important moving forward.

You've done research specifically with almond hulls. Is there anything you recommend or issues people should think about when they feed almond hulls?

I'm going to start with a cop out and say talk to your nutritionist. It's very important. A lot of it is going to depend on what other feedstuffs you have available. It's not just almond hulls, it's for any feet stuff or byproduct. How you fit it in is dependent on what else that you have available. On our conference website (https://ucanr.edu/sites/CAdairyconference/New_Page_247/), we've got some presentations in the almond whole section. We've got a really nice, comprehensive presentation that Dr. Ed DePeters from UC Davis gave at the California Animal Nutrition Conference in May. He goes through a lot of considerations of digestibility and quality. Not every almond hull load is the same. Knowing what quality you're feeding is important. There's lots of really good, practical considerations in that presentation. If folks have the time and the interest, I would say to go to the website. I think there's a lot of good information.

What were the challenges you ran into when developing and sending out the survey?

Asking a question in a way that you know you're going to get useful information, but not a burden on the person filling out the survey can be very difficult. There's so much I want to know. When you get past 10 minutes, no one wants to finish your survey. That sweet spot of asking information that's going to be useful, but not being so big of a burden on these people that they never want to see an e-mail from me again is a challenge. Industry standard for response rate of a producer survey is 10-15%, which is not a lot. That's one of the biggest challenges. I tried that and I got a 12% response rate. That's why I wanted to go to the dairy nutritionist. I knew that as long as the cow number was large that I was going to be representing the industry. It didn't matter if I reached 25 nutritionists or 250 nutritionists, if I can get to a million cows then that's a pretty good representation of the industry. It's a work around. Every time I do a survey, I learn something. Something that I've done wrong that I can do better for the next one.

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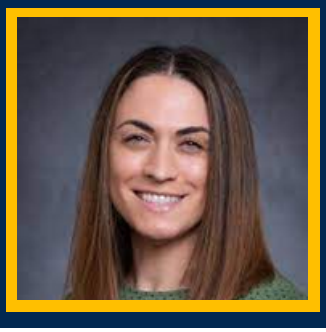

RESEARCH CALL WITH JENNIFER HEGUY

What is next for the survey?

We are working on publishing the survey results. We will submit it for publication. I will have newsletters in our Golden State Dairy Management newsletter. I will probably present this next year at the Farm show. We usually do dairy seminars at the farm show or the World Ag Expo in Tulare. It'll probably be at a Golden State Dairy Management Conference. Once that meeting near kicks off, we will have lots of information summarized on feeding byproduct in California that I think will be interesting for folks.

Anything else that we didn't cover that you would like to mention now?

Go check out the website and if anyone has any suggestions or ideas for other things that we should be looking at with byproducts or feeding or basically anything, I always welcome people to send me emails or call me about things that they think extension should be working on.

FEEDLOT RESEARCH BRIEF

Survey of the use of beef semen in California dairy herds

Introduction

- Using beef semen on dairy herds is not a new technology, but has picked up momentum as a strategy to improve profitability and manage heifer inventory.
- There was an almost 5 million dose increase of beef semen sales. A similar sized decreased was seen in dairy semen sales.
- The objective of this study was to describe current California dairy management strategies related to the use of beef semen in dairy herds.

Methods

- A questionnaire was developed to obtain data on the used of beef semen in California dairy herds.
  - The questionnaire had 33 questions related to:
    - Herd info
    - Beef semen management
    - Sexed dairy semen management
  - All of California was surveyed, but three regions were compared in the analysis:
    - Northern California
    - Northern San Joaquin Valley
    - Greater Southern California

Results

- 141 responses were collected representing 21 counties.
  - Responses represented 11.9% of dairy animals in the state.
- Herd size
  - Range = 105 to 5500 cows
  - Average = 1693 cows
- Milk production
  - Range = 18.1 to 45.3 kg/cow/day
  - Average = 35.2 kg/cow/day
- 72% of responding herds were pure holstein

Results cont.

- 81% of responding herds were using beef semen
  - Main reasons for using beef semen were extra profit and control of heifer inventory.
  - All jersey herds were using beef semen on their herd.
  - 58% of farms using beef semen were using it for 1-3 years.
  - Angus was the most common semen among all dairy breeds.
  - Pure jersey herds used limousin semen almost equal to angus and tended to use more than one breed for insemination.
  - 86% of herds using beef semen were also using sexed dairy semen.
  - Breed selection of sire was based on:
    - Calf ranch preference
    - Cost
    - Calving ease
- Cow selection
  - Sexed semen cow selection was based on:
    - Lactation number (mostly heifers and 1st lactation cows)
    - Reproductive performance
    - Genomic testing
    - Milk production
  - Beef semen cow selection was based on:
    - Reproductive performance
    - Lactation number (mostly later lactation [3rd and 4th] cows)
    - Milk production
- Price of day old crossbred calves
  - Angus day old price was the most variable.
  - Wagyu and Charolais Holstein crosses had the highest prices.
  - Jersey/Charolais crosses had the best value.
  - Region, calf ranch contract, and herd breed had greatest impact on calf price.

Conclusion

Use of beef semen is increasing and is currently widely used. Lactation number and reproductive performance are the main criteria being used to determine use of beef semen. Price of dairy crossbred calves is variable and dependent on different factors.

CONTACT

Have any questions, comments, or suggestions? Want to send in a Quiz Zinn question? Contact the creators through the below email or through their social media profiles.

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