



DAIRY DREAMS

November 2020

Virtual Tour Video Transcripts

1 WELCOME TO DAIRY DREAMS



Welcome to Dairy Dreams! Dairy Dreams is located in Kewaunee county Wisconsin. We are on the Door county peninsula in north eastern Wisconsin. We actually have the distinction of being the second most concentrated dairy cow county in the Eastern United States.

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As far as the honor of having the Showcase here at Dairy Dreams this year, we're very thrilled that Alta chose us to do that. We'd like to welcome everybody to the event and welcome you to Dairy Dreams.

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This dairy started as a project of John Pagel and I's, two friends, 20 years. I first came to Casco as a veterinarian in 1983 and was John Pagel's veterinarian when he started his farm here in the area also. We work together very closely and we love trying to be progressive in many different ways and then in 2001 decided that it was time for us to build a dairy together and that became Dairy Dreams where we are sitting today.

0:58

We started out as a 1200 cow dairy at the time, which at that time was the largest dairy in Kewaunee county. We've subsequently gotten to just under 3000 cows right now, and we are no longer near the largest farm in Kewaunee county so there has been a lot of progress in this area. A lot of good ideas, a lot of good cow people taking care of cows so it's great to still be here in the county and working with people like that.

1:22

The mission of Dairy Dreams would be twofold I would say. One is to provide an environment for our animals that gives them a life worth living. Gives them the comfort, the security and the level of care that they need without being intrusive beyond that.

1:38

The other thing I think that we've done is filled a leadership role with many others in this area of concentrations of cows. We have some shallow bedrock geography here with some challenges for water quality and we work together as an agricultural community and we made some huge improvements to the point where I think we have some of the most environmentally sound dairies that can be found anywhere. And we are in an area that particularly benefits from that.

2:03

Being one of the many farms here taking the lead on environmental stewardship, cover cropping, split nitrogen application, protection of sink holes – all the things that are specific to this area. When I first got here 40 years ago people were

either farmers or related to farmers. Now most of the population here doesn't have any relationship to farmers whatsoever and it is up to us to introduce ourselves, to put our best foot forward and let them understand that farms are here to provide high quality of food to society. But also, to help care for our neighbors and make sure that the environment is also well protected.

2:38

One thing I'd like people to understand is we're a 20-year-old dairy that has never stopped trying to be better in the next year than in the previous year. We might do that with ventilation system changes that we make, we might do that with Alta COW WATCH and the dramatically reduced cow lock up times that we have from that.

2:58

One other thing is we've been participating in the PEAK embryo program for a long time and that exposed us to the idea that we could actually just minimize and then eliminate Leukosis disease from our herd.

3:11

As far as looking ahead for the success of the dairy going forward, I think the big thing for our continued success going forward is to make sure that we continue to enable and put our managers in positions to grow themselves and increase their responsibilities to the point where the old guard is irrelevant and the new younger guard has taken over.

3:33

It gladdens my heart to see that the new management team at Dairy Dreams is going to be so focused, so capable and so caring. But I think nurturing and making sure we have the right people here – add the right people to the team that we need to add. I think that on the people side is going to be some of our biggest things in positioning this dairy to go on into the next generation.

2 EMPLOYEE ORGANIZATION AND MANAGEMENT



My name is Don Niles and we are here at Dairy Dreams Dairy Farm. The workplace culture at Dairy Dreams is based on an understanding that management and employees have, that we take care of each other.

0:15

We expect a lot of our employees – the ability to get their jobs done appropriately and have the tools in place. They also expect a lot from us. They expect to have good jobs, safe working conditions, a source of income. More importantly here, employees have the understanding that they also have the ability to advance and improve within the company.

0:36

We very strongly believe in not bringing in outside managers and outside middle range managers – we want to make those opportunities available to our staff. When people start here, virtually everybody starts as a milker. That is an important base job for the dairy, and we need people to do that job properly and well, and with enthusiasm. But we also give people a chance kind of to self-identify themselves as maybe being a good candidate for a greater responsibility, such as a calf manager or maternity manager, feeder or things like that.

1:07

I think our fundamental structure here is start off flat and let people identify themselves, let management recognize the people that have ability for more responsibilities, and make sure that when those opportunities crop up, it's your own people get those opportunities, who have been waiting for something like that.

1:25

I think a common mistake on dairies is for middle management to lose track or sight of the base level people just starting out in the parlor. Having the manager of the parlor who is in touch with his people, and he is in touch with the new people – he's finding out, 'How is your house? Do you have a good place to stay? Are you comfortable there? Do you have a way to get to work? Do you know where the grocery store is? Do you have the means to get the groceries?'

1:52

I think that having that level of communication between management and our newest and most vulnerable employees is a critical thing on a dairy for retention.

2:02

The wait-list. The idea that there is people, that when there is an opening, have already identified that they would like to come here. Either they are new to the country or moving into the area.

It wasn't anything that we ever set out to do, but it is something that was accomplished by bringing people in and taking care of them when they got here.

2:20

Taking care of those people so that the word starts getting out from them to their friends and their relatives that this is a good place to work. People take care of you here. They expect a full day's work and they expect the work to be done properly. They expect cow care to always be exercised. We hope to always maintain that.

2:39

We feel that we have a lot to be proud of on Dairy Dreams. In our case, it is because the opportunities that we have provide for the people that have come to help us on the dairy as employees. We've got some superb managers here. We've got some people that have come looking for opportunities to do good healthy work and make good incomes for their families.

3:00

As I look back, I think the opportunities that we have created for some great people to make great lives for themselves is the greatest source of satisfaction.

3 MILKING PARLOR



Hi, I'm Steve Lambrecht, I'm the manager here at Dairy Dreams. We're standing in the milking parlor, it's a double-42 parallel Boumatic parlor. Our procedure in the parlor here is the first guy does 11 cows, the second guy 11 cows, the third guy 10 cows and the fourth guy 10 cows.

0:20

They'll go through and they'll strip all the cows first, and they'll check for mastitis and stimulate the cows. Then they'll come through with the teat scrubber and they'll clean and dry the cow. Then they'll come back and attach the cow.

0:32

When the cow is done milking, the units automatically come off and then we'll apply post dip to the cows. Here at Dairy Dreams, we're shipping 4 tankers of milk per day. That's about 260,000 pounds of milk per day and we ship our milk to Saputo Cheese.

0:49

We shut down to wash 3 times a day, the shut down time is about 25 minutes. The whole rest of the day there's cows in here being milked.

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We've been using the teat scrubbers for about 3 years now. We got rid of using the towels and it made our parlor go a lot faster and it definitely made training new employees a lot easier.

1:08

New employees always start off with an experienced employee, we have 2 or 3 guys that do the majority of our training, and then they'll start off slowly and they'll do like 4 cows at the beginning and then they'll keep going... more and more cows until they're able to handle the job on their own.

1:23

When they strip the cows, they're looking for flakes or mastitis or abnormal milk. They'll put paint on those cow's legs, so we know if they don't catch to go get them and we'll put them to sort in the sort pen to sort and then we'll put them over to our hospital pen.

1:38

We used to concentrate on the percentage of milk in the first 2 minutes very heavily and we were getting 18 pounds in the first 2 minutes and now we're down to the 15-16 pounds and we still believe we have good stimulation and stuff but we're able to get the cows through the parlor faster now, so we've quit looking at that metric a lot.

1:58

And now we concentrate more on the number of mastitis cows in a day and make sure the cows are getting properly dipped and stuff. We'll review video of the guys in the parlor to make sure that they're doing the procedure correct and post dipping correctly.

2:15

We use a Pulse needleless injection system for giving all of our repro shots and any dry shots or vaccines.

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We use that because we're trying to get rid of leukosis in our herd, so we're not taking blood from animal to animal. We used to use single needles and it takes a lot of time to change needles in between and using the Pulse system makes it a lot faster and easier to use.

2:38

When we started using the needleless injection system, we were worried about the cows being scared in the parlor and stuff, but we learned in the beginning if we stayed back as they're loading, stay back about 10 cows, we were able to give the cows their injections before the units were attached without scaring the cows and now the cows have become used to getting the shots and they really don't move at all. And they're not scared and don't kick or anything when the shots are being given with the system.

3:04

Now in the parlor, you have 100% of cows here, so you go down, so we have one guy scanning and giving the shots, so we took a 3 or 4 man job and made it into a 1 person job.

4 FEED CENTER



My name is Ryan Schultz. I am the assistant dairy operations manager. We are at Dairy Dreams in their feed center at this point.

0:08

We utilize ten different recipes, depending on what the animals need for their nutritional needs. We are heavily based on a corn silage diet. Probably 50-55% corn silage, 20% haylage, remainder being different concentrates that we purchase in.

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We played with BMR in the past but have some really good digestibility corn silage in the last couple of years so kind of gone away from BMR at this point, considering it again in the future but have gone away from it at this point.

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We do contract corn gluten pellets, cotton seed, canola, whey permeate. We purchase in our dry hays and our straws from outside of the area.

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We're cropping 2400 acres of corn silage between purchased and owned. We run about 2000 acres: 2200 acres of cow haylage, harvested 4 times and another 1000 acres of heifer haylage on a 3-cutting rotation.

0:53

Our feeding program that we utilize is FeedWatch. We've been on it for quite a few years actually – well before I've been here. We've recently updated to one of the new monitors, the touch screen monitors so that's been a big help for the guys. Instead of using words it uses pictures, but FeedWatch is a program that we utilize to track the recipes as well as we use a series of excel spreadsheets that we utilize. Our nutritionist has done great work on creating a spreadsheet, see different ways to look at it and present it to us.

1:20

We run two feeders per day at Dairy Dreams. We have our two primary feeders that run 12 on 2 off. The opposite weekend we have our maintenance crew that's able to cover for them. So all of them are fully capable of doing everything that needs to be done. They start about 3 o'clock in the morning and by 11:30 in the morning they're done feeding everybody. Then they have to prep their piles for the following day as well as transfer any bales that need to be transferred and then clean up the yard.

1:44

The feeder performance is tracked by their errors that they have while loading as well as the drop times. How long it takes them

to mix a load on a per day basis and just making sure that everything is consistent as we can get it for the cows.

1:56

We do target a 7-10 day transition in any transitioning of a forage – even if it is the exact same pile, just the opposite side of it. Bringing it in, in a lower inclusion rate and then slowly adjusting the ratios of the two ingredients to balance out the difference and then at the end of the 10 days we're able to fully remove it.

2:12

All haylage and corn silage do have inoculants on it. We just feel it just gives us a bigger bang for our buck out of our forages what we're putting up there. And it helps us to reduce our shrink. FeedWatch does somewhat monitor the shrink but we've had a little bit better luck with our own excel spreadsheets. So every month we track what we use, throw an approximate shrink on it and then at the end of that feed source, we correct that shrink to what it truly is. It's based off of what was delivered in because every load is scaled when we come in. Every field is sampled through the lab, multiple samples and then at the end of that with knowing what we have delivered and what we fed out calibration is checked every other week just to make sure that everything is proper so knowing what we delivered to the source and what we removed from the source, we calculate our shrink from that.

2:52

I do utilize Alta COW WATCH on a daily basis to track different things with the feeding end. My main thing that I look at is the herd performance trends. I can definitely tell the weekends where I have my sub feeders are on. If there's any deviation in the drop pattern, eating patterns, then work on correcting that to get everybody doing the same thing every day. As well as it will alert me if any pens have been out of feed for an extended period of time just from a pen alert. I'm able to detect when a pen was away from feed, out of feed, when they were in the parlor, as well as when the feed was pushed up by watching different spikes within the eating pattern of the pen.

3:21

We're pretty basic and straight forward. We're running seventeen loads a day. They guys are running approximately 30 min per day loading. We are looking at updating our feed center in the future just to get a more enclosed system so that we're not loading out in the open.

Kyle is our main feeder. He's been with us approximately 18 years and just a wealth of knowledge and dedication on our behalf.

5 MATERNITY AND TRANSITION



Hi, I'm Steve Lambrecht, manager here at Dairy Dreams and we're in our maternity area in our transition cow barn. In this barn we have all of our pre-fresh cows and heifers. We limit them to one cow per head lock. Then on this side of the barn, we'll have all of our post fresh cows which also we limit to one cow per head lock. We'll keep the cows in here for about 7 days until they're milking 80 lbs and the heifers will spend their first 10 days in here and milking over 60 lbs before they're moved out to the regular herd.

0:33

In this area here we have the maternity area. We'll move the cows into the pen, 'just in time calving' we call it, so the feet are coming out, the head's coming out a little bit and they're actively engaged in calving. We don't want to move them too early because the cow will shut down and not have her calf. So after every cow, they put new straw, they move them into these pens, they'll lock the cow, they'll scrub up the cow and check the position of the calf. Make sure the legs are right, the head is right and then they'll let the cow go. After 30 minutes if they can visibly see the calf is progressing, they'll leave her alone. If not, then they'll intervene, and they'll scrub her up again and they'll check what's going on. We don't have any calf jacks here, any pulling is done with just chains and then we don't pull until there's distress to either the mother or the calf, like the nose of the calf turning purple or something like that or the cow really, really straining and needs a little help.

1:25

After the cow has the baby, the calf is taken in a wheelbarrow onto the scale and weighed, ear tagged and then moved to the pen. Then we'll lock up the mother of the calf and we'll milk her, and we feed the colostrum to the calf within the first 20 minutes of being born.

1:43

We weigh the calves at birth and then we also weigh them at weaning and 5 months so we can see their average daily gains and see if the calves are growing and if the feeding protocols are correct.

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We also check the IgG proteins on the calf. We pull blood on all of them to make sure they're getting the colostrum, getting the proper amount. Each calf is tubed the colostrum and fed 1 gallon worth of the colostrum.

After the cow's milked, they put bands on her – red bands – and then she's moved into the hospital pen and then she'll be milked in the parlor after that.

2:12

Past couple of years now, Dairy Dreams has a 1% DOA rate (dead on arrival). Starting off years ago we were at 5%, which everyone thought was good, and we thought we could get better. So back here we have a camera and any dead calf is reviewed to see what happened and we'll ask the guys what they thought happened and we'll review the camera and see what actually happened and then we'll use that as a training process. Right now, most of our maternity guys have been back in the maternity area because they really like working back here for many years, and we have very little turnover back here. So we have some really good experienced guys.

2:48

The fresh checks in the morning, the fresh cow manager will go check the computer and see on Alta COW WATCH if there's any cows that need attention on there and he'll take that list and walk in front of the fresh cows, check the feed, see the appearance of the cows, if they're happy, their ears are up and then he'll go around and walk the back of the cows, check udder fill and any discharge and then only the cows that need to be checked are the ones that he'll actually either sleeve or check for DA.

6 CALF CARE



I'm Don Niles of Dairy Dreams and you find us right now in one of the nursery barns for our newborn calves here at Dairy Dreams Dairy Farm.

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This is a 60-cow nursery barn that's just been filled, it takes us about 3 or 4 days to fill a new barn. We've got 8 barns identical to what you see here... we're typically feeding about 300 to 330 calves milk at a time.

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You'll see we've got 2 sides of 30 stalls each. We want to be able to feed the correct amount of milk to the calves based on their size because some are more large and some are smaller. We feed milk 2 times a day after the calves have gotten started in maternity with their full gallon of colostrum. And then they'll come down here and they'll receive 2 feedings of milk a day and we'll gradually increase the milk for the time until they're weaned.

0:49

The way we manage feeding the right amount of milk to the newborn calves is to put the larger calves on this side as we start filling the barn and the smaller calves will start building from this side, so at one point down at the father end of the barn, we'll reach the point where at the last large calf meets the first small calf and at that point we can make an adjustment on the milk cart to reduce the feeding level of milk a little bit for the newborn calves.

1:12

They have water from the beginning when there's not milk in their bucket. The grain you can see actually in this barn here, we've got these small, dog dishes we call them, shallow pails with grain in them. So the newborn calves can get used to reaching in and just nibbling on some grain without having to stick their head into a bucket, which I think some calves find kind of intimidating and they're reluctant to eat their grain.

1:35

As far as the day to day operations with the calves, that would be the Dairy Dreams Calf Team. We'll have the manager go through once a day, look for calves with scours, that need electrolytes either orally and/or IV electrolytes.

1:46

They're in charge of the vaccination program. We use a Pulse needless injection system for leukosis control so we're not using one needle, one common needle between several animals. We're dehorning the calves with paste dehorner when they're one day old and we find that at that age they're not likely to rub it off very easily and we're able to do the dehorning without any great discomfort for the calves also.

2:09

A lot of thought went into keeping the calves comfortable and healthy in these barns. As you can see, we've got two ventilation tubes running down the length of the barn, both of these carry air that is blown in by fans at that end, to distribute it over the calves whether the curtains are open or closed to get fresh air down right on the calves in hutches, but do it in such a way that it's not a sharp blast of cold air that's going to cause problems for the calves getting too cold.

2:35

The curtains are controlled electronically, so we can manage them by hand or we can raise or lower the curtains. We are very religious about having enough dry, soft, fluffy bedding under the calves. Calves should be able to work their legs down into just a little nest area in the bottom. If there's not enough straw to do that, they need to have more straw.

2:54

As the calves are weaned and moved out of here, about 7 weeks of age, they move from here in the individual pens into super huts outside which are groups of 8 calves.

3:04

We take the weight data as we move them out of here and we'll put the largest 8 calves together in their group, the next largest 8 calves will be in their group. So we're sizing them in their first group housing as appropriate for having similar size calves together in the same spot.

3:20

We're very particular about how we pick the people that will take care of these calves. The calf workers, we want to have the people that have shown us the most empathy to animals, they care about the animals, we want that kind of person working on our calves.

3:32

So we make the Calf Team a little more specialized of an opportunity and when somebody shows us those skills or characteristics in the parlor after 6 months to a year, that's likely the person we're going to pick to come out here and work on the calves.

3:45

As far as the care and feeding for our pre-weaned calves, we firmly believe that that's the core of our herd, that's our future right there. We know there is many tremendous commercial calf raisers in the world but we feel for us, we sleep better at night knowing that we've got our own future here within our hands.

7 BREEDING AND HERD HEALTH



Hi my name is Steve Lambrecht, I'm the manager here at Dairy Dreams and we're standing in the vet/breeding office.

0:12

All the stuff for preg checking cows, all that stuff is held in this office. The semen tanks are over there, we thaw the semen here, and then we go breed the cows right outside the office.

0:19

So we use Alta COW WATCH to find the cows in heat and the guys will check in on the computer there, find who's in heat, then we'll put the cows to catch in and then we have a sort pen right outside the office here which we will breed the cows in.

0:31

So in the morning, the guys will go through the list in Alta COW WATCH and they'll look at any cows that are on the Sick report, they'll put them to catch, and then they'll also sort right through the sort gate here.

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And the guys will lock them here and they'll check if their stomach is full, check their manure, check and make sure there's no mastitis or anything and see if there is anything they can do to help that cow return back to normal.

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If she's good they let her out and if she needs more attention, they keep her here and move her to the maternity area.

1:00

Before Alta COW WATCH, we used to use the Milk Deviation Report and we'd also put the cows to catch in and we'd walk the pens more often during the day just to see if we could find cows.

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Now we're finding cows more early with Alta COW WATCH and being able to treat them faster. We cut our dead cows in half since we started using Alta COW WATCH.

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So now for the normal days we don't lock the pens anymore, so the cows aren't locked up. Before we'd lock the whole pen in, chalk the whole pen and then write down which cows were in heat, come back to the office here, get the semen, walk back out to pen and breed the cows.

1:36

So the pens were locked for a long time. Now the cows can return to the pen, they can lay down if they want, they can eat if they want, and they... they can be cows.

1:45

On preg check day we'll put all the cows to sort that need to be preg checked and we'll lock them just in the first locker, so we only have those 30 cows in the pen locked up. The rest of the pen is let to do what they want to do, and all our repro shots are done in the parlor. So we don't have to lock the pens for any shots or any health work.

2:04

So now the guys... with the cows catching, the sick cows, and all the cows coming to them and not having to go paint the cows and spend all the time painting the cows, we have more time to check sick cows, and do a better exam of the sick cows and give the sick cows more attention than we were giving them before.

2:20

Since we made the change to the system, the Alta COW WATCH system, now the cows are allowed to lay down when they want and when you walk the pens you can just see the cows are more comfortable, more happy, and they can do whatever they want.

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They're not locked up all the time. If they want to lay down and rest, they can lay down and rest. If they want to eat, there's not as much pressure at the bunks. When you do a walk-through of the pen, you just see that the cows overall are a lot more comfortable.

8 COW COMFORT



I'm Don Niles from Dairy Dreams dairy farm in Casco, Wisconsin and here we find ourselves in Barn #2, which is one of our two main milking barns for Dairy Dreams.

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This freestall barn that we're in right now was part of the original construction for Dairy Dreams when John Pagel and I built this dairy in 2001. We built with sand freestalls, the freestalls being that the cows in this pen have about 300 animals, are able to move freely throughout the pen, and they get milked 3 times a day, so they walk up to the parlor. Otherwise, they're free to be in their pen here and they can go from stall to stall, they can choose a stall they lay in. They can just be cows for the 7.5 hours that they're in here 3 times a day. They just go to work 3 times a day to the milk parlor.

0:44

We also have a sprinkler system in here. The first level of soaking with the sprinklers will start around 70 degrees F and then it increases progressively as the temperature goes up from there.

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We had VES design an entirely new ventilation system for us that I'd like to talk about in this barn. Originally when we built this, it was the state of the art for the year 2000. We had curtain sidewalls that opened up completely down to the ground and we had some fans that would blow over the cows while they were locked up feeding.

1:14

About 10 years later, our partner in Ponderosa, Pagel's Ponderosa, built a tunnel ventilated barn. That became a better system in the summer than our open curtain system was. We started working with the VES company and they came up with a modification for this barn that was pre-existing, whereby we closed up the side walls, that's poly panel now that doesn't open whatsoever. We increased the number of fans in the barn substantially and we also now blow air into the sides of the barns through these PPF fans that you can see on the outside walls. So now in the summer, we're blowing air in on this end and we're blowing air out on that end, so it's a push-and-pull air system. We bring fresh air in and we're able to control air speed throughout the barn constantly.

2:00

This hot summer that we just had was our first full summer with this system and it was by far the most comfortable summer that we've had ever. We love how the technology of the positive and negative airflow improved what had been just a natural airflow system in the past.

2:16

Cow comfort of course is a huge topic and a critically important topic to all of us. What we actually say here is 'if we ever die and are reincarnated as a cow, would we want to come back to our own farm to be a cow?' I think the answer is yes. I think the cows

live a pretty good life here. We try to let them be cows as much as possible. We no longer do group lockups like we have for the first 19 years of the dairy.

2:41

We're able to take care of some vaccinations right in the parlor with a Pulse needleless injection system, we're not using needles now for leukosis control. We're also sorting cows out for breeding, we're detecting heats with the Alta COW WATCH system so we know already going into that milking who we want to sort out.

2:59

They never have to come back to the barn and be locked up. We think that self-lockers are well designed and provide as much cow comfort as possible, but we feel not having to use them at all is even a bigger step in cow comfort.

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We've sustained over 100 pounds per cow of money-corrected milk per cow per day so that's been a goal of ours for a long time. We're feeling these changes helped us get there.

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For years and years and years I was told as a veterinarian, and I told my clients, we need to dry treat all of our cows. We prevent mastitis that way, we're going to treat chronic infections that way, and now it's just a standard industry recommendation.

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We started looking into the selective dry cow therapy and we came up with a protocol of only putting antibiotic dry medicine into a cow that either had a cell count above 100,000 that lactation or had been treated for mastitis that previous lactation.

3:50

If her cell count remained below 100,000 and she's never treated for mastitis, we don't give her any antibiotics at dry up now. She'll get a teat sealant, an internal teat sealant instead, but no antibiotics and at this point, we're dry treating less than 20% of our cows with antibiotics anymore.

4:05

So we've gone from what was maybe the Achilles' heel of the dairy industry, which is every cow needing antibiotics every year, to a system where we're finding the few cows that do, we're treating them appropriately but we've gotten away from the blanket treatment of antibiotics in dry cows.

4:21

These are very exciting times for people that care for their cows. We've put these protocol in place and refined them and I think we're reaching a very high point in the dairy industry where our ability to manage cow numbers and manage those cows extremely humanely and effectively are coming together. This is a great time to be a dairyman and a great time to be dairy cow I think.

9 DIGESTER



I'm Don Niles of Dairy Dreams Dairy Farm in Casco, Wisconsin.

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Here we find ourselves in the bedding solids bay from our methane digester.

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We installed our methane digester about 12 years ago on the dairy for several reasons. One is that we are interested in reducing our carbon footprint.

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At that time Dairy Dreams had an odor issue. We didn't think that we were being good neighbors and we didn't have a great reputation with the people who lived down wind from our manure pit. So we wanted to remedy that situation and that made the digester very appealing and very effective. The odor issue went away completely at that time.

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We originally still used our sand bedding despite the digester but after several years of doing that we decided to switch over to dry biosolids bedding like you can see here in this bay.

0:47

And we've actually been very pleased with the udder health and cow comfort. It's been a very successful and very satisfying change.

0:56

For the first several years with the digester we produced electricity and sold electricity back to the utility. That market went away however, and there is no longer an opportunity to do that. So a couple of years ago we partnered with DTE and now all the methane in our digester is collected.

1:13

It is cleaned, compressed and put into their tankers that go down and use it for truck fuel at a filling station about half an hour south of here. It is actually more profitable than it was with the electricity. We don't have the expense of the gen sets producing the electricity that we had before. It has been a good partnership for us, and I think for DTE also.

1:33

The dryer for drying the solids was something that we added after originally using the pressed biosolids that were about 35% dry matter. At that time we did have an unacceptable level of mastitis for us – the somatic cell count was going up and we had more hard quarter cows.

1:48

So after working to try to solve that problem we eventually just put in the drying system. We get our biosolids dried to about 50% dry matter now and that has made all the difference in the world. Drying the biosolids really seemed to be a critical piece of the health puzzle

2:03

As we mentioned, there was a number of problems to solve for us. The odor issue, the potential coliform contamination issue, looking for the proper bedding for the cows. Most dairies would benefit from one or more of those benefits but not everybody would.

2:18

It is a significant expense. Now that we are able to do the gas systems with partners it is not as much of an expense for the dairy as it used to be, but it is a commitment of time, labor and energy. You have to have people that are paying attention and the skill to do the mechanical work, monitoring the digester every day looking for issues and recording data.

2:39

It's like a real big cow! It still takes management.

10 GENETIC STRATEGY



Hi, I'm Jon Holewinski with Alta Genetics. I'm a Premier Account Manager with Alta. We're currently at Dairy Dreams where I do a lot of the premier account work with Dairy Dreams and we're currently in the heifer and dry cow barn at Dairy Dreams.

0:14

Dairy Dreams was traditionally a purebred Holstein herd. About 3 years ago they made the decision to go to a Holstein x Holstein x Jersey cross. Their goal was to lower the mature body weight of that animal by about 200-250 lbs while maintaining energy equivalent milk of a Holstein along with obviously eating less feed to achieve that. That was kind of the main focus of why the switch was to go to crossbreeding with the Holstein x Holstein x Jersey cross.

0:44

So they start off with a pure Holstein and what they did was they bred that pure Holstein to a Jersey to create an F1. And then that resulting offspring – that F1 – would get bred back to Holstein, and the subsequent calf from that mating will also get bred back to Holstein. The subsequent calf from that mating will go back to Jersey and they'll start the process again. So, it's Holstein x Holstein x Jersey. And what their goal is to create a $\frac{3}{4}$ Holstein and a $\frac{1}{4}$ Jersey. Trying to take specialties from each breed and combine them together to create a more profitable herd that's very efficient with income over feed costs.

1:20

The strategy is implemented across the entire herd so basically, the animal that's born, whatever breed they're supposed to get bred they'll get bred to that their entire life. And it's set up in DairyComp that it does a series of commands that it automatically sets the breed type that they should get bred to right at birth. So as soon as that calf hits the ground, they know I'm either going to breed this animal to either Holstein or Jersey for its entire life, with the exception, they do incorporate some beef into the breeding program as well.

1:53

The Dairy Dreams index is set up that they have 50 – 50 emphasis. So what that means is they have 50% emphasis on production traits and then 50% emphasis on health traits. They don't put any emphasis on conformation because we feel that we already get that with our bull selection so there's no need to put that because we don't really have a lot of negative conformation bulls that are making poor conformation animals.

2:20

The specific traits that Dairy Dreams is looking for in each category was, they ship their milk to a cheese plant so we focus a lot on Fat and Protein lbs. We don't focus a lot on fluid milk just

because they don't get paid for their water so they focus a lot on the Fat and Protein lbs. And then on the Health side, they focus a lot on Productive Life trait (PL), Daughter Pregnancy Rate trait (DPR) and then Somatic Cell (SCS). Those are the three main traits they focus on in the Health bucket.

2:47

The heifer breeding strategy is, each heifer that Dairy Dreams has will get up to three services of PEAK embryos and then any heifer open after three services will get bred for up to two services and then after that fifth service they become a DNB (do not breed) and removed from the herd. So then on that fourth and fifth service they will use sexed semen.

3:09

So to show them the genetic progress that they have made over time, I utilize DairyComp quite a bit to show the genetic progress by birth year of animals that they currently have in their herd. I also show them what at Alta we call 'Proof in the Numbers' so specifically showing genetics they have specifically selected for, and how does that translate in what they're actually seeing from a phenotypic standpoint. And what I mean by that is if they selected for 1000 lbs of milk do they see that 1000 lbs of milk deviation from herd mates. Same thing with Fat and Protein, I can show them obviously the higher the fat content of this bull and Protein content that equalates to more Fat and Protein lbs shipped on that specific animal.

3:49

We will review that on an annual basis and we change bulls here 3 times a year, so after each subsequent proof round we review which bulls fit best for our Dairy Dreams index and then those bulls will get put into the tank and used for that 3 months. And sometimes, certain bulls rank high so we'll use them for multiple proof rounds just because they are so good genetics and if they're working fertility wise, we will continue to use them as well.

11 PEAK GENETICS PARTNERSHIP



Hi, my name's Jon Schefers, PEAK Female Program Lead and today we've taken a little detour and we're here in Watertown, WI at our PEAK Production facilities where we produce over 5.5 million units of semen annually.

0:16

PEAK has worked with Dairy Dreams for the last 6 years. Over the last 6 years we've transferred nearly 10,000 embryos and it's been a real pleasure to work with them.

0:26

So when PEAK is looking for a recipient herd, there's really 3 key pillars that we look for and these are the reasons that we chose Dairy Dreams as a recipient herd for the program. First of all, we chose to work with Dairy Dreams because of their excellent pregnancy rates and live calf performance. So we can really count on Dairy Dreams to produce lots of pregnancies and live calves from the embryos that we send them.

0:50

Second of all, they do an excellent job with their calf care, especially the bulls. So we can count on them to create bulls that are healthy because we know that healthy bulls make semen earlier, they make more of it, and they make semen that's of higher quality.

1:05

And then finally, their herd health. We know that we can get bulls that come from this herd that are free of IBR, free of Leukosis, because we know it is very important to have bulls that are health clean for our export markets across the world.

1:20

In a typical year, we have about 300 PEAK bulls that are born at Dairy Dreams. About 30-60 of these become AI quality bulls. We've had lots of international super stars and best sellers that have been born at Dairy Dreams throughout the years, including AltaZAZZLE, AltaPLINKO, and AltaGOPRO.

1:39

We all know AltaZAZZLE. A triple threat sire, high on TPI, high on NM\$, high on 60-40. He's sired nearly 30% of the top 100 young bulls in the world as of August 2020.

1:53

Then we have AltaPLINKO, another great bull for the Alta brand and we're excited about his impact in the future. And then we have AltaGOPRO. He's an international super star. He's one of our favorite sellers that our clients love and the type that we love to breed.

2:11

So for the bulls that are born at Dairy Dreams, typically we categorize these in three groups. We have what we call our mating sire bulls, so these are the best of the best. We have our AI quality bulls that we sell and market regularly and then we have our cull bulls.

2:28

So typically for mating sires, those bulls are identified at around 30 days of age and they're removed immediately and sent to our PEAK facilities for intensive management.

2:39

Our AI bulls that we market, typically those are removed by six months of age and at that point they move to PEAK facilities where they can acclimate and begin production once they're ready.

2:50

I want to thank Dairy Dreams for our successful partnership through the last 6 years. It's been a pleasure to work with them throughout the years and we're really excited to create even more great, high quality bulls for the Alta brand in the future.