TRUE BLUE TOUR SERIES

LA RAMADA

April 2021

Virtual Tour Video Transcripts

English

Alta

1
WELCOME FROM SERGIO PAGNUCO

Good morning, my name is Sergio Pagnuco, production manager of La Ramada Corporation. Our company is located in the city of Esperanza, in the province of Santa Fé in the center of Argentina.

0:15

First of all, I want to welcome the people from Alta Genetics to this tour and also the producers who are joining us virtually from different parts of Argentina and the world.

0:37

Now to explain more about La Ramada. La Ramada is one of the Gonella Group companies, which are based on two important activities:

One is the metallurgical side where boilers, gas tanks and oil equipment are manufactured,

and the other is the agricultural side with La Ramada Corporation, Lácteos La Ramada y Balanceado La Ramada.

1:11

The start of La Ramada was in 1970 with founders Lito and Edgardo Gonella, father, and son. Together, they bought land in Santa Fé, 30 kilometers (19 miles) away from where we are standing now. Today that farm is called Hipatia. The land base is 265 hectares.

1:40

Back then, they bought 30 heifers and got started with the dairy farm. As time went by the company grew in the amount of land owned or rented. Through the 2000's, the company had 12 dairy farms and 5 heifer rearing units with a total of 4000 milking cows. Their average production at that time was 18.5 liters (4.9 gallons).

2:26

In 2008, I decided to start keeping the cows in barns. At the beginning of 2008, we had 3 dry lots and 1 free stall, which is where we are today with 500 cows in free stalls and 800 cows under dry lot system.

2:47

In 2012, we kept on growing and investing until we had free stall housing with sand bedded stalls on 4 dairy farms, with an average today of 3,200 cows in milk that produce 38 liters (10 gallons) on average per cow per day.

3:12

The company has always invested in cow welfare, in the comfort of the cow in order to achieve the best production, good reproduction results and every aspect that keeps the us growing.

3:35

The farm also considers the preservation of the environment. We have a manure management system with a sand-manure separation system to allow us to recover sand bedding from the stalls. Water used in the sand recovery also is reused. We recovered 85-87% of the sand we purchased. Reused water will be used to irrigate a specific lot. All the waste from the manure system will be applied to a lot where soil has been previously tested in order to increase the productivity and quality of both crops and forages.

4:35

In 2017, with CIALE Alta, we purchased a very important technology for us. Neck tags have very much improved cow mortality rate and also reproduction, improving the indices to levels that make us very satisfied.

5:04

Since this company was created, we have always aimed for growth, innovation, and development. So with what we are seeing today, we are reaping the results of what we have sown for so long. And well, we are very happy today with the times we are going through.

5:28

I hope you´ll enjoy what is left of the tour in our home! Thank you very much!

2
NUTRITION

My name is Mauricio Benzaquén, nutritionist and consultant for Latin America for Progressive Dairy Solutions, and I have worked as part of the La Ramada team since 2012. My job is nutrition consulting, feed management, and general consulting together with La Ramada Team.

0:25

The general structure of the La Ramada herd, in terms of different rations, consists of a dry pen and a close-up, one pen of fresh cows, a high producing group, and a first lactation high producing group, plus one pen of cows with maintenance requirements. Cows and their diets are organized based on these pens, to cover their requirements and needs. In February, the cows produced 41 liters on average.

0:57

In terms of management, cows are dried off on a weekly basis. With the aid of a DairyComp list there is a whole group of weekly activity lists. These cows are moved to the dry-off pen.

1:10

We also have the list of cows that must go from the dry-off pen to the close-up pen. They stay in the close-up pen for 21 days before calving and they receive a special diet for prepartum cows. After calving cows are moved to a post-fresh pen where colostrum is harvested, and then they go to the fresh cow pen.

1:37

Since we have implemented Alta COW WATCH, the decision to move them is based on the animal's rumination and eating patterns. Previously, it was done based on the days in milk of the cows. But today it depends on data whether the cow is ready for a more "aggressive" diet, sort of speaking, a diet for high production.

2:01

This technology has allowed us to move the cows from the fresh pen sooner if their transition period is going well and allow them to reach higher lactation peaks. Currently cows in this dairy have peaks of around 51 liters at around 60 days in milk, and 43 liters at 90 days in milk for first lactation cows.

2:27

Generally speaking, the diets for lactating cows range from 45% to 48% forages in the rations for the high producing herd, and about 60% for the maintenance herd. This will vary depending on the quality of the forages themselves. Diets are, on average, 36% corn silage , 17% alfalfa hay or wheat, depending on what it is available, 7% cotton seed and about 4%-5% milk permeate.

3:06

The rest is concentrates that are produced by the La Ramada feed plant. The feed plant has been a valuable addition to the company in recent years, allowing to simplify complex processes on the farm, meaning that the feeds are complex, but they are mixed properly in the plant. That ends up simplifying the process itself allowing traceability of the ingredients and confidence in which ingredients are being used.

3:51

About the corn silage, the mostly common is conventional, and depending on what is expected that year, we use some BMR corn for the silage. In any case our goal is to achieve quality forage with high fiber digestibility and maintain a balance with the level of starch from these silages to have a cost-efficient diet.

4:23

In regard to daily feeding management the manager has a crucial role in the feeding management. It's the manager who performs a weekly dry matter determination every Friday or when he notices changes, he will do a dry matter test. It's also the manager who monitors feed intake through feed bunk observation early in the morning and in the evening prior to a feeding. Those observations, along with the number of cows in the afternoon, allows us to keep a consistent amount of TMR available.

5:02

Usually, depending on the time of the year we feed once or twice a day. We check the bunks, and we aim to not having more than 5% of feed remaining. Currently, regarding the daily feed delivered, we have between 2.5 to 5% refusals.

5:35

3 years ago the farm purchased robotic feed pushers, which has led to fewer refusals and always keeping feed in front of the cows, which has not improved production as much as components. The automatic pushers make 7 to 9 rounds daily, pushing feed with a range of 80 to 40 centimeters from the bunk, depending on the system settings.

6:05

Regarding heifers, there are two rearing phases. That heifer unit is divided into pre-breeding, bred, and pregnant heifers. Diets are between 45-80% forages depending on the group.

6:31

We expect to get an average daily gain of 960 grams which it is the goal so we can breed them at 13 months of age. We aim for calving by 24 months without much assistance and low number of perinatal deaths.

6:57

Our goal at La Ramada is to have a systemized approach to all management areas, chores, and nutrition. From the moment the feed leaves the plant, we have traceability. From the time we chop the silage and bag it, we try to keep the best quality so that it will show later in the productive efficiency both in production and in health.

3
REPRODUCTIVE MANAGEMENT

Hi everyone, I´m Mauro Molina, veterinarian in charge of two of the dairy farms of this firm and also responsible for the reproductive management.

0:05

We are in the Llambi dairy farms in the insemination facilities where all the reproductive routines are performed, such as inseminations, injections, pregnancy check palpations.

0:23

Our reproductive management consists of a fixed-time first artificial insemination protocol of 7 days of progesterone and estradiol as inductors of a follicular wave for ovulation synchronization. Then, we continue with heat detection using Alta COW WATCH neck tags and inseminate those cows showing heat looking for the best time to inseminate.

0:53

We decided to start implementing this protocol of fixed-time insemination, and we improved first service conception rate by starting insemination at 66 days in milk. We used to do it at 50 days in milk, but we have better results with this protocol and so we are achieving 40% pregnant cows.

1:23

We check for pregnancy by palpation currently every Monday and our vet check list is generated by DairyComp. We will soon be using the Pocket Cow-Card version on tablets. So far, we are using printed lists. But with this application, we are going to be more efficient finding the cows to be checked.

1:47

Since we started using the Alta COW WATCH system, we have managed to get a pregnancy rate above 20%. Today we are at 22% pregnancy rate, and a 62% insemination rate. Even with this system, in summer our pregnancy rate doesn´t surpass 15%, meaning the heat stress and summertime are really a challenge. We are trying to improve those indexes.

2:23

We know that during those 4 or 5 months of the year when the THI is over 75 many hours in the day, it is a great challenge to be able to maintain or improve reproductive efficiency. Though we are able to maintain productivity, reproductive efficiency drops during those months because of the excessive heat we have in summer and how it stresses the cows. We use CONCEPT PLUS bulls that we know are the best in fertility.

3:00

Hello, my name is Sebastián Wirsch. I´m part of the Alta Genetics team for Argentina. We work alongside with La Ramada helping them to detect timing problems by analyzing information from DairyComp and continually looking at the results with them and going over the results when we don´t get the outcomes we want so that we are able to correct them in time. We also check the work routine.

3:34

We had a complete change in results by using Alta COW WATCH in the farm. Today we know whether the cows are in heat or not. We can check that very easily in the computer that the outcomes are the ones we should get based on the cyclicity of our cows.

3:58

As Mauro told you before, our great challenge was to know if our cows were cycling. Knowing this accurately is fundamental and that drove us to design this reproductive management system here.

4:10

We emphasize fixed-time insemination more than we usually do in other dairy farms that have Alta COW WATCH since heat stress affects cows cyclicity. Since heat stress impacts the cyclicity of the cows mainly during the summer.

4:27

Today, we are able to check after each preg-check whether the open cows have shown heat or not. To know the facts and not to blame the staff that is performing the task is essential to achieve precision and accurately know what´s going on.

4:50

On this farm, pregnancy rate is constantly above 20% with an annual pregnancy rate of 22%. And the truth is that everybody is satisfied, especially the staff, with the results that we are getting with this technology.

5:06

So hopefully you will enjoy this virtual tour in Llambi Campbell that is a beautiful dairy farm to visit. And let´s hope that in the future it will be on-site!

4
TRANSITION MANAGEMENT

Hello, my name is Ricardo Sifre, manager of the dairy farm. I am going to tell you a little bit about how we work with the fresh cows and close-up pen.

0:19

We bring the dry cows here about 20 days before calving. We check them on a daily basis and monitor them until the day of calving.

0:29

There are 3 people who work on a rotating schedule. We also make a round at night and have the help of the neck tags.

0:43

We wait until the day of calving. Once the cow calves, we harvest the colostrum. And once the colostrum has been delivered to the calf, the dam is taken to the milking herd, to a fresh pen where she is offered a special ration.

1:09

Fresh cows are checked twice a week. We measure urine for ketosis, check for metritis, and make sure the cow is ruminating properly. Cows stay in the fresh pen for about 24 days until we are sure that they are doing fine. And then we put them to their corresponding pens.

1:44

Once we check a fresh cow and we are certain that she is ok and healthy, and we check with the neck tag that she is ruminating ok, we release her into a high-producing pen.

2:10

Since 2018 Alta COW WATCH neck tags play a key role in La Ramada farms. Although not all the cows have neck tags. They are removed at dry-off and put back again at close-up so that we can monitor all the situations and stages that the dam goes through as she stays in the close-up pen until calving.

2:32

There's no doubt that this stage of a fresh cow is a crucial moment for the dairy cow, where health, production, and reproduction join together at the same time. The cow transitions from being dry into lactation, producing a large amount of milk at her peak in a few days. And on top of that, we have to get that cow pregnant.

2:53

So being able to monitor that stage from close up to calving until they leave the fresh pen is crucial. We must monitor how we do it here in La Ramada to have a success in the present and future lactations in all our cows.

5 MATERNITY

Hello, my name is Juan Vieri, I work at La Ramada S.A. La Ramada has four production units, and each unit has its own maternity and calf raising.

0:13

Cows close to calving are housed in the maternity area. Once a week, we get a DairyComp list of cows that are within 21 to 28 days of delivery. We do a rectal examination to monitor pregnancy, and we administer the second dose of vaccines against neo-natal diarrhea and against complex respiratory disease.

0:38

Once this is done, they stay in the maternity pen. There, they are fed TMR once per day, and it is checked that they have feed and water available 24 hours per day.

0:50

There are 3 operators in charge of the maternity area and calf rearing area. They begin their workday at 6 o'clock in the morning.

One of the operators starts pasteurizing milk for the calves, and the other goes to the maternity area to check all calvings that have occurred during the night. Then, during the day maternity is monitored as naturally as possible. Assistance is only given in the event that the delivery does not progress naturally.

They are doing these activities while also performing the tasks in the calf raising unit, with an interval of no more than two hours between prepartum checks to see how they are progressing.

1:35

Once the cow has delivered, a protocol is followed with this cow, including a rectal examination to check that there is no twin or other problem during the delivery. The udder is checked for mastitis and they proceed to their first milking with a portable milking machine to harvest the colostrum. Then they put the date of calving on the rump and that cow goes to the milking parlor, where she continues through the milking cow routine.

2:09

All colostrum from that the cow is measured with the Brix refractometer, using colostrum that is above 22 % BRIX.

2:23

There is also a protocol for the newborn calf in which it is identified as male or female, vitality is monitored, the navel is dipped, and colostrum is given. We 4 liters of colostrum (1 gallon) - 2 liters (0.5 gallons) as close to birth as possible, and 2 liters of colostrum given a few hours later.

2:50

In the event that we do not have enough quantity of colostrum, we use dried Colostrum 100. There are also cases when we do not have colostrum that exceeds 22 % BRIX. In this case we also use dried colostrum to improve it.

3:06

Once this protocol is done, the calf enters calf rearing unit where she starts the milk phase. The calves are housed in small, individual houses with wheatgrass beds, and they start their milk diet. They receive two daily feedings of two liters of milk during the first 15 days. Then from day 15 to day 45 it goes up to 2 feedings of 4 liters (1 gallon) each. On day 45 it goes back down to 2 liters (0.5 gallons) per feeding until one week before weaning. The last 4 last days they no longer receive milk, and we wean them at around day 60.

3:54

Also every week we take a group of calves that are between one and four days old, and we take a blood sample also with the BRIX refractometer. The passive transfer is measured; we consider 8 degrees BRIX as good passive transfer, and our objective each month is that 85% of all calves sampled have good passive transfer.

4:21

Both male and female calves that are housed in our units receive the same treatment and in turn, at the same time they are housed in group pens we start providing a balanced diet of good quality. Also 2 hours after they receive milk, free-choice water is offered to all calves.

4:38

Once the suckling stage is over, the group is kept in a corral, and we follow a protocol for identification, taking photos and measuring weight. During the pre-weaning period, the vaccination plan is also carried out always using the DairyComp listing. All the calves follow the vaccination plan and receive a booster in the rearing stage.

5:13

Once the calves are weaned, in the first week they are fed a balanced feed and free-choice water, but they are already loose. Then they continue their feeding with a balanced feed, and after the third month they start to receive TMR. At five months old, they go to a common heifer rearing which receives all calves of the four La Ramada dairy units. They continue their process until they return at seven months pregnant.

5:53

An interesting topic that we can appreciate at La Ramada is how they articulate between everything that is part of the input technology and process technology. We can see very well how everything is with collars, and using software, trying to make use of technology to improve all health and reproductive aspects. And it's also very interesting to see the work they do with Colostrum 100 in newborn calf management, where it is a fundamental tool to achieve a good passive transfer in calves, precisely when you do not have maternal colostrum because the cow did not give colostrum of good quality or because in some cases, she gave no colostrum.

6:51

Using Colostrum 100 as a unique maternal colostrum supplement becomes a key tool for passive transfer in calves and in the other ways too, enriching colostrum and taking it to qualities of excellence from colostrum that is less than 25- or 26-% BRIX. That achieves a performance of excellence when it comes to measure the passive transfer, which as Juan told us, is to stay above 85 to 90% of calves with passive transfer per month.

6
BUSINESS INTEGRATION

My name is Carlos Gonella. I am currently the president of La Ramada S.A. It is a company that my father started in 1969.

0:11

Our main activity is metallurgical, but we separated investments where in 1969, we started buying land, with the one goal of those fields being to transform them into milk production.

0:31

In 2000 after the economic crisis in Argentina, we made a decision to convert La Ramada and in 2004, we were determined to try and industrialize our milk.

0:44

In 2005, we established contact with a group from Peru, which is the Glory Group of Peru. We agreed to start an industry in Argentina to make powdered milk using the name Corlasa.

0:59

In 2010 we decided to go our own way. We sold our partnership in Corlasa to start our own factory project and we named it Lacteos La Ramada. In the same year, we revised the production model at La Ramada, trying to convert the grazing dairy farms to free stalls, achieving a reduction in number of hectares worked, and better use of the number of cows per hectare, reaching today levels of 3,200 cows at 38 liters (10 gallons) average per day.

1:44

In the 4 farms that we have today we have a plant that is called Lacteos La Ramada that has a capacity to process 520 thousand liters of milk per day into powdered milk. Last year, we processed an average of 420 thousand liters (110,952 gallons) per day, of which La Ramada dairy supplies 120 thousand liters (31,700 gallons) of milk per day. The rest is purchased from producers in the region.

2:11

We decided to produce our own feed, so in 2015, we built a concentrate plant that today is currently undergoing an expansion to reach a monthly capacity of 5000 tons of concentrate product per month. We are managing to market 3,500 tons per month, where we offer our producers to bring us their own product to exchange, or they can sell to us.

2:36

We sell soybeans and corn that allow us to make concentrate products to go out and market. This story is about what we did to accomplish this from the primary production that started in 1969 with the first purchases of fields and the first dairies that were purely a grazing system.

2:57

In 2020 we reached an industrialization of primary production growth, and even an importance in the local market – as well as with a certain presence in the international market for high quality product with the powdered milk brand Regina from our plant, Lacteos La Ramada.

3:17

Today our agro-industrial group invoices between 80 and 90 million dollars. When we started this process La Ramada did not reach a turnover of 2 million dollars per month. That is what we always look at.

3:34

In my personal preparation, I studied industrial engineering. I'm very into this line of business. I like to be the family group leader. The industrialization adds value to what we produce, a bit as a family goal to achieve these objectives.

3:55 We have opened a business line of field services, including sowing, harvesting, planting, chopping for our producers themselves. As well we aim for an agro-inputs business line to try to sell all the production inputs, including, let's say everything that is the technology package for the planting, as well as all the medications for the treatment of the cows themselves.

4:29

We started from a company that produced 45,000 liters (11,888 gallons) of milk and had 145 employees in a grazing system with 8,000 hectares of fields. We transformed it so that today we use 2500 hectares to produce milk, and the rest of the hectares are agricultural sales. We use no more than 100 people in the production process.

4:52

In four modules, in total we have 3200 milking cows, an average of 38 liters (10 gallons) in a freestall system. We run our own transport company. We bring our milk to our factory that processes 500,000 liters (132,086 gallons) of milk per day into powdered milk and marketing it.

5:08

We handle the distribution to our own clients with our own trucks. We have our own concentrate plant where we generate feed for La Ramada and for our customers, with their own grains that we produced and some that we bought. And now we want to get to the marketing of inputs as for the technological package.

5:32

Well after this review I would like to invite you to the organized virtual tour - I will not say by our provider, but our strategic partner, Alta Genetics, who has been working with La Ramada's genetics for many years. And thanks to this, we can talk about what it is each of the cow produces, so that you will see virtually what La Ramada is. Or in a future opportunity when we are able, you can come here to visit. A big greeting to all producers and keep on working!

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DON INO

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1
WELCOME FROM DIEGO CERVIGNI

Welcome to the DON INO establishment, in Ordóñez, Córdoba, Argentina. My name is Diego Cervigni and I am the manager of this business. We are dedicated to dairy as the third consecutive generation on this farm.

0:13

DON INO is a family company that has its origins with Ino Cervigni, who was my grandfather. He started many years ago in agricultural livestock, dabbling in various activities within the field including beef cattle farming, swine, and dairy. Currently the third generation of our family continues with this legacy.

0:39

Ino started with the dairy activity in the 1980's with a few milking cows. In the 90's he decided to continue with the dairy operation and built the first dairy with 8 milking stalls in the parlour in which he milked approximately 100 cows. When the third generation of our family took over the small dairy farm, we milked 120 - 150 cows with 8 stalls.

1:08

Out of our ambition to grow, we had to expand. We modified the milk parlour to 12 stalls, increasing the size of the infrastructure and the size of the herd, as well as the area dedicated to the dairy farm. The advancement of agriculture generated increased competition for the use of space for raising cattle, which forced us as a company to make some decisions.

1:27

We could either close the dairy or start a closed housing system for the cows. In these moments, we began to analyze different systems for dairy production for our future.

1:46

We traveled to different countries and saw some important dairy farms around the world. With this knowledge, we made the decision to move into closed housing barns with sand beds. We built what you see behind me, which is a barn of 500 cows that was completed in 2017. From the time the first cows entered the new barn, we started to see very good results in both the milk production as well as in the health of our animals.

2:19

In 2018, the barn was already at capacity and we needed to advance the infrastructure. Our first idea was to build a 24 -stall milking parlour with rapid exit. At that time, while on a trip to Brazil, we discovered Lely robots. The facts made us change our minds, and we lost our uncertainty and advanced on that course.

2:45

A year later in 2019, we had 8 robots installed, milking 430 cows. All these advancements have been an achievement, and they are a point of pride for the DON INO company. And all these results are due to the work of a great team with many years of history behind us.

3:05

CIALE Alta is a fundamental participant in all of this. We have been working together since 2013. Working on genetics, technical consultation, and guiding us forward to where we want to go, from our history to an operation of 450 - 500 cows with robots, with the best production levels.

3:30

As you can see, in this virtual visit to our farm, we are still in the process of continuous construction. Our goal today is to keep building on everything we started, and focus on the environmental and economic sustainability of our business.

3:50 We appreciate your participation in this tour and I hope you can get an idea of how we produce milk here at DON INO in Argentina. Thank you very much!

2
NUTRITION

My name is Mauricio Benzaquen and I am the veterinary doctor nutritionist. I work for Dairy Progressive Solutions in Latin America as a consultant for nutrition and management. Since 2014 I have been part of the Don Ino team under the direction of Diego Cervigni. Since that time we have been working on farm transition and in the recent years we have begun the free stall system with robots.

0:40

The robotic milking system that Don Ino chose is a free traffic system where the cow has the option of going to milk, resting in the stalls, or going for a walk as she pleases. This is a system focused on cow comfort and to encourage the natural behavior of cows.

1:00

Hi, I am Alejandro Roda, the Don Ino farm feeder. My job is to feed all the groups of cows on the dairy. Well, this made it a lot easier for me when they started with the robots, because before feeding was morning and afternoon. And now, it is only given once a day.

1:33

The challenge in this system is to attract the cows to the robot, and this is done through animal comfort, the design of the robotic area, and also through nutrition. In combination between what we give at the feed bunk, which is called PMR or partially mixed ration, and what we are giving in the robot, which is a specialized pellet that helps to partially supplement the mixed ration.

2:11

The amount of PMR and amount of pellets that the cow eats is based on the production curve of days in milk for the cows, plus the composition of the milk that the cows produce. The cows eat the same PMR in each of the pens. Here we have 4 pens and according to the requirements of each cow, we supplement more or less pellets in the robot.

2:39

At Don Ino, we seek high productive efficiency, and at the same time to minimize the consumption of the pellets in the robot. Today we feed approximately 5 kilograms of pellet in the robot with 2.9 to 3 milkings per day, and about 1.5 to 2 rejections by the robot. By rejections I mean when the cow was just milked, and she wants to go to the robot again. The robot just tells her she does not need to be milked and must be returned to the pen.

3:13

The PMR is basically 60% forage, mostly corn silage. It has some wheat silage sometimes, it has sorghum silage or BM generally with some supplement of protein concentrates, energy and mineral salts. We are looking to simplify the system with a formulation based on corn silage but supplemented within the crop cycle rotations with sorghum silage for example, or wheat silage.

3:56

That is an easy way to systematically harvest throughout the year, always looking for what the quality of the crop is in order to obtain high production in the dairy from high levels of feed produced in the field. We feed the animals at Don Ino, from the time they are calves until the moment they deliver a calf.

4:20

Once in lactation, we have four groups with two robots in each one. There is one group of cows in first lactation, another that is intermediate in terms of lactation and two groups of mature cows.

4:35

Later the cow is dried off and has a dry period that lasts until her prepartum period that is 21 days. After calving, the cow goes to a training pen where they are presented with the robot. Some cows already know about the process, and for others we must train them to know the system.

4:57

Once they comply with certain requirements like number of visits, rejections, and eating the pellets in the robot they are ready to go into the herd. In the main herd, according to the ration plan, they are given more or less grain until peak production time and after peak, until dry-off. The pellet concentrate quantity for each cow can go from 2.5 kilos to 9 kilos for a cow in peak lactation.

5:33

In terms of peak milk, second and third lactation cows are currently around 55 liters, transitioning from a conventional milking system to a robotic milking system. Peak production for the first calf heifers is around 40 liters.

5:49

The system designed here at Don Ino seeks the greatest possible cow comfort, and in fact the production of the cows proves it, and their reproduction also shows it. In that system we also have an automatic feed pusher, so the cow has consistent access to the PMR in the bunk. Also, through the collars we can monitor the rumination time and the eating time.

6:22

Rumination as much as eating time are parameters that we use to approve the cows in the process of training towards the rest of her lactation, and it also helps us understand certain moments - either environmental or management - about what happens to the cow and the feed. In fact the focus is back on the cow. DON INO makes the effort from the moment the calf is born until the moment the cow leaves our herd to focus on animal comfort and animal health.

7:12

And now, I thank Alta for the invitation and gift for allowing me to be part of this very successful group of managing dairies. Thank you very much!

3 COLOSTRUM

My name is Vilma Bennati and I am a veterinarian who works in the Don Ino establishment. The start of Don Ino is in the calf rearing units, and it is where it all begins.

0:11

It starts in maternity, when the newborn is received and we apply a double iodine seal, pace the tag and give the calf colostrum enriched with Colostrum 100. We collect colostrum in the robot, and the BRIX degrees of that colostrum obtained from the cow is measured and supplemented to achieve a consistent BRIX % 30 quality.

0:35

The key objective is obviously efficiency in the colostration of the calves and achieving the best quality possible. Based on the colostrum quality obtained from the cow, we have an app, and we calculate to supplement to enrich it to BRIX 30 and build up a colostrum bank.

0:54

When the newborn calf arrives here, it is fed with 4 liters of the already modified colostrum from our bank. Now, the nursery stage itself begins and this stage is for 60 days, and then they go to the heifer rearing units. What we try to do is efficiently feed colostrum because it is the initial step, and we want to keep the calves healthy.

1:27

After 60 days, they go to the heifer rearing units and change to a new plan of care. Basically everything has a protocol in this shed, where we see here there are only females. The males are in a traditional staked system.

1:43

With the addition of Colostrum 100 we not only standardize the colostrum, but it has also helped us in efficiency. We lowered the incidence of clinical cases for example, in the presentation of diarrhea. And what we see, and you will be able to see are healthy calves. 100% healthy, this makes us as an operation have a good base for all the rest of the development stages.

2:13 I developed the routine for the calf rearing units. It starts at 6 a.m. when we give pasteurized milk in our protocol. They are fed milk plus a supplement. We have a feeding plan that is adjusted according to how many weeks old the calf is. Also, it is given to balance the diet. Water is offered after the milk feeding and it is all on a weekly protocol.

2:47

For all the daily tasks, we have three people in charge of the calf rearing units. We have two men who are in charge of the heavier tasks, and a woman who is responsible for the health. She works with me. When they go to the heifer rearing units at first, we have special pens for each stage, an intermediate stage for weaning and then according to the weeks of age their feed plan changes. Always with the objective of gaining weight and having good calves. In this case, we are raising only the females - the males are in a feedlot on another location.

3:35

Most of the protocol is based on DairyComp. Using the list that the system gives us, we bring in the prepartum cows one week before calving is due and give vaccinations.

3:46

The maternity team is also in charge of the calf rearing units - they are the same people. They check the maternity area as many times a day as possible, and if a cow is calving or any cow is showing signs, they check every 40 minutes. The same staff are responsible for the maternity care, the calf rearing units and the heifer rearing units.

4:14

The mortality rate in our calf rearing units is 3% until weaning, and 4% in peripartum. We always work with goals at weaning and at this stage we actually have 900 grams of daily gain. We always look to continue improving and maintaining that goal in later levels, and up to now we have had very good results.

4:45

As well, Vilma proved to us that this is a fundamental area contributing to growth and efficiency of the production system at Don Ino. The truth is that they do a very interesting use of Colostrum 100 in the protocol. In fact, they are one of the first to have incorporated this practice in Argentina, with the enrichment of maternal colostrum with Colostrum 100.

5:11 We see the importance of standardizing the quality of all colostrum to 30% BRIX. From this practice, we get total coverage of the new calves in the calf rearing units with high quality colostrum/ That allows all calves to be colostrated with the highest quality of colostrum, which enables an efficient defense of all the herd if there is entry of some type of pathogen into the environment.

5:36

Actually, Vilma has shown us how clinical cases have decreased and how through that, the calves achieved a highly efficient weight gain performance, reaching 900 grams.

5:53

Enrichment is very interesting. Here we see the power of Colostrum 100 for enriching and standardizing colostrum when we have poor quality colostrum, or average quality, in the herd. So the experience has been really good with very interesting data, with highly competitive numbers and highly efficient.

6:13

I invite you to continue participating in this tour by visiting other stations - thank you!

4
REPRODUCTION MANAGEMENT - COWS

Hi, I'm Sebastián Wirsch, veterinarian member of the Alta Genetics sales and technical team. I manage the account with Don Ino and am responsible for developing and maintaining their genetic plan. I have also worked on developing the reproductive management program.

0:30

Alta's history with Don Ino goes back 8 years to when I first met Farm Manager Diego Cervigni. At that time, the farm looked very different from what you are seeing today. It was a grazing-based system with a controlled breeding season milking less than 200 cows. By that time, it was clear to Diego that he wanted to introduce new technologies to the farm to increase production per hectare and per cow.

1:10

In this area of Argentina, dairies are competing with other agricultural development, and efficiency is essential in order to turn a profit. With this in mind, we implemented the first genetic plan 7 years ago, with a 60/40 emphasis on production and health. The herd on the farm at that time originated from Holstein genetics from New Zealand.

1:55

Over time we began to see things change. With the emphasis on production traits, we were able to eliminate lower production genetics more quickly. On the management side, we moved cows from grazing into dry lots with a TMR and started milking three times per day.

2:32

After a few years with our initial genetic plan and the program well established, we began aiming towards the robotic milking system you see today. At that point, we modified the genetic plan to focus on 70% production and 30% health traits. We are using the top bulls from Alta such as AltaAGOTADO, AltaGOPRO, AltaDDINSE, and AltaNERVE. This year we will also be introducing AltaSTEALTH and AltaSHAZAM.

3:14

The reproductive management plan we have designed works thanks to activity monitoring neck tags with Nedap Technology. Cows are monitored 24/7 and bred first service based on fixed-time insemination, with a second breeding for cows done based on an activity alert.

3:51

We used to detect heat first based on activity monitoring and then used fixed-time insemination on those we were not able to detect. However, we found we were getting better conception rates using fixed-time first service than cows inseminated around 50 days in milk that were showing heat. So we moved to 100% fixed-time first service and achieved excellent results, with annual first service conception rates on first lactation heifers up to 52-53% and 40-45% on mature cows.

4:37

The overall annual pregnancy rate is 30%, with 34% in first lactation heifers and 24-25% in mature cows.

4:58

Good afternoon, my name is Jose Martin Valentino and I have been working at Don Ino for 27 years. I began on their feedlot operation and then moved over to the dairy farm. When I first started, there were 6 milking units in the swing parlor, then 8 units, and then with time we added automatic take-offs on 12 milking units.

5:28

When I first started, I was in charge of everything, from calf care, to breeding, to managing grazing plots. After moving to a confined system, we began to manage work differently. Personnel were hired just to care for calves. I was responsible for reproduction and health management, which I still oversee today, but I also worked in the milking parlor. When I began managing reproduction here at Don Ino, we used tail chalking to detect heat. Later a veterinarian named Vilma began working here and we started working on some new ideas. Activity monitors were purchased, and we gradually stopped using tail chalk.

6:39

Nowadays, this is my routine: We arrive at the farm at 6 or 7 am and the first thing we do is check which cows need to be inseminated. Then we visit the heifer rearing unit. Following that, we review the information from the activity monitoring system, from cows with possible mastitis to cows in heat. Then we check the cows that have been sorted by the system. We try not to manually sort cows and to rely on the system in order to reduce stress.

7:27

Having operated several different systems, in my experience our quality of life now is better. I used to spend 10-12 hours a day on farm and not be able to enjoy time with my family. Now with the robotic milking system, the monotonous aspects of a dairyman's job have changed. It used to be routine and now it is a different lifestyle, which I want to stress is priceless.

8:16

I thank everyone who has visited the farm through this virtual tour to see what we have been working on!

5 REPRODUCTION MANAGEMENT - HEIFERS

Hello and welcome to the heifer reproduction management area. The process begins with an entry of new heifers every 3 weeks. In order for them to enter the insemination group, they must weigh more than 400 kg (882 lbs) and be at least 13 months of age. We used to measure height as well, but we found we had so few heifers that were 13 months and below our height requirement that we stopped taking that measurement.

0:34

We currently inseminate with sexed semen for the first 3 services and then twice more with conventional semen. Our goal is a 40% pregnancy rate with this group, which we are currently achieving.

0:55

We administer prostaglandin on arrival and check for heats every week using tail chalk. We use the AM/PM rule, where heifers that are visually heat detected in the evening are inseminated the next morning and heifers that were not observed in heat the afternoon before, but have rubbed their tail chalk off in the morning, are bred that afternoon. This is the schedule when we breed with sexed semen the first 3 services. On the fourth and fifth services, we use conventional semen and breed in the morning only, capturing both heifers that were observed in heat the previous afternoon and that same morning.

1:54

Using this reproductive management system, we get about 75-80% of heifers pregnant with sexed semen. This farm has a cull rate of about 38% due to selection intensity based on the robotic system. Cows that don't adapt well and don't perform well in the system are culled, which is why our rate is so high.

2:28

Our mortality rate is less than 6% since we have such strict selection, and the use of sexed semen and excellent breeding results means we have surplus heifers. We have discussed whether or not to continue using sexed semen since we do have a surplus of heifers which means additional rearing costs, but the current market value of heifers vs the price of beef means it is more advantageous to have extra replacement heifers to sell.

3:11

We are also starting to use genomic testing to genotype all the females on the farm in order to select which animals are most efficient, which daughters are most likely to perform well in our system, and which heifers should be offered for sale.

3:35

We work with a genetic index of 70% production traits and 30% health traits and using Alta GPS software to assign rankings based on sire and grandsire and determine which females are superior.

3:58

However, we are now in a stage where we want even more confidence in the information we analyze and so we are starting to advance our genomic selection. Our average age at first calving is 23 months, with 90% of heifers calving between 22 and 24 months. We have some that calve at 21 months but none more than 25 because they would not be selected to stay in the breeding program.

4:35

So, this is the way we manage heifer reproduction. Thank you for your attention and I hope you continue to enjoy the rest of the tour!

6
ROBOTIC MILKERS

Here we are at the robotic milking station and I am going to walk you through our transition from conventional milking to a robotic system.

0:08

In 2017 we completed the barn and once we were finished, we knew we needed to invest in the milking parlor. We were using an old parlor with 12 units from 1985, which was already worn and practically obsolete. We planned to build a parlor with 24 stalls with rapid exit and as we were looking into it, we came across robotic systems in other countries and wanted to bring this pioneering technology to Argentina. We secured financing and were able to install the robotic system.

1:09

We began using the system in 2019 and we still see the benefits today. We have calmer cows, improved milk production and better milk quality, which has led to better feed conversion.

1:40

The cycle of the robotic system first begins with cleaning the arm, which is disinfected with water and detergent three times per day, first on the night shift, then in the morning and afternoon. We always follow this routine and the robots are disinfected on both sides of the parlor. We have 4 stations and for each station there are 2 robots which are disinfected.

2:13

We first bring in the fresh heifers who have just calved and lock them in the corrals to give them priority access for milking. Then we look at the robot's list and mark the late cows based on the cows that have already come through before leaving that station.

2:41

When we are bedding and cleaning the alleyways, we look for the cows that were late to visit the robots. We sort those cows off and hold them to give them priority access for the next milking.

3:19

Once we are finished cleaning and reviewing everything in that station, we move on to the next. We repeat this 3 times a day over 3 shifts. There are 3 different washes, acid, alkaline, and sealant, and the robots are cleaned twice a day, once at dawn and once in the night.

3:46

The combination of robots and activity monitors has helped us improve and intensify all aspects of the dairy. We are able to detect and treat mastitis and we have lowered instances of disease and mortality in our day-to-day operations.

4:13

This is a free-flow robotic system, so the cows enter the robot voluntarily to be milked. We do however still need staff on hand to check the lists because there is always a cow that does not come through, either because of illness or lack of training. The heifers especially need time and training to enter the robot before they are comfortable and enter voluntarily.

4:49

We average 2.8 milkings per day, which is higher for heifers once they are trained and lower for mature cows because the robots dispense less feed for them, and they are not milking as much.

5:18

We have 4 staff who regularly review the lists for both milk production and reproduction and determine why the cow isn't visiting the robot. They can then move her into the robot if necessary or treat her for any illness. The staff are also in charge of training fresh heifers to come through the robot for the first 2 or 3 days until they learn the routine.

6:01

I hope you are enjoying this tour that Don Ino is proud to be invited to host. Thank you for your time and we will be ready to answer any questions not addressed in these stations during the live event. Thanks!