

MILK

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NOVEMBER/DECEMBER 2021

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PASSING THE TORCH

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FARM JOURNAL



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“It took my parents losing their only son in an automobile accident in 1995 to establish a living will.”

This Uneasy Talk Could Save Your Farm

I can still recall hearing, “Hello, Americans. This is Paul Harvey. Stand by for news,” coming from my old childhood farmhouse during the lunch hour. My father would be drinking coffee and my mother was over the stove, both quietly listening to every word that came out of that AM radio. Years later, the iconic broadcaster’s compelling voice froze me in my tracks, as I heard his iconic “So God Made a Farmer” speech during a Super Bowl Sunday commercial. Those words clung to every farmer’s heart. To have a son or daughter follow in your footsteps is the highest compliment.

But one thing stumped me. As much as farmers want their child to come back to the operation, few sit down and openly talk about the process to make that happen. Instead, that much-needed conversation is put off for another day.

WHAT IFS

I get it. It’s so much easier to talk about milk production and feed costs than pause to talk about succession planning. But consider the “what if” scenarios. What if dad has a stroke? What if our son’s new marriage ends in a divorce eight years down the road? What if after farming with your brother for 30 years you decide you no longer want to farm? What happens to the farm then? Yes, those can be hard conversations, but you know what’s even harder? Selling the family farm at auction.

It took my parents losing their only

son in an automobile accident in 1995 to establish a living will. While they didn’t have anyone to take over the family farm, they still talked about the what ifs. What if dad had a stroke. What if mom dies first? What will happen to the farm then? My sisters and I are blessed our parents were brave enough to have those worrisome conversations with their children. When those what ifs became our realities years later, we didn’t have to think while undergoing heartache.

BEAT THE STATISTICS

Our cover story on page 8, “Passing the Baton,” shares Ohio dairy farmers Kurt and Robin Steiner’s personal succession planning story, including how vital their plan became down the road.

Sadly, statistics paint a different picture. The Small Business Administration reports less than a third of family-owned businesses survive the transition from first to second generation, and it dwindles to even fewer going from second to third generation.

Beat that statistic. Start the uncomfortable conversation about how the family farm will be passed on. Nobody really knows when God is going to call them home. Live like you’ll die tomorrow — and plan for it, too. **M**

Karen Bohnert
Dairy Editorial Director



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Australia's Milk Season Off to Poor Start

Production dips below August 2020 levels for the fourth largest dairy exporter

Australia has now logged two back-to-back months of season-over-season production declines, but Dairy Australia, remains optimistic that production will match or exceed the previous season's by as much as 2%.

According to Dairy Australia, August milk production dropped 3.6% below August 2020 levels to about 1.57 billion pounds. Every state in Australia recorded a production drop, except New South Wales, which posted an increase of 3.7%.

"The national decline was of similar in scope to that seen in July, the first month of Australia's production year," says Monica Ganley, analyst with the Daily Dairy Report and principal of Quarterra, a consulting firm in Buenos Aires. However, with the bulk of the production year still ahead, Ganley

"Favorable economics for producers are expected to support future milk growth."

says that plenty of time remains for output to improve.

"Favorable economics for Australian producers are expected to support future milk production growth. Unlike producers in many corners of the globe, Australians

are benefiting from lower input costs," Ganley says. "Strong production of concentrates and forages last year has left many producers with feed supplies to start the year. Meanwhile, plentiful rains have favored pasture growth and could reduce producer dependence on purchased supplemental feed."

Rising fertilizer prices along with an increase in some crop diseases could create some challenges moving forward. However, Ganley notes lower feed costs will likely outweigh these challenges and motivate Australian producers to increase output yet this season.

LARGE DAIRY EXPORTER

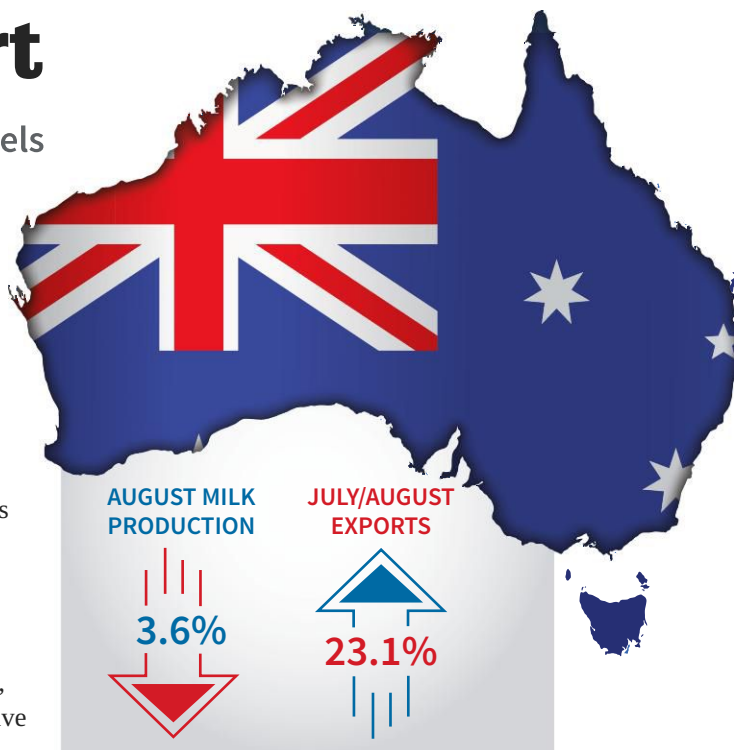
While the share of Australia's milk supply that's exported has dropped over the past decade, the country still exports about one-third of the milk it produces each year, making it the world's fourth-largest dairy exporter.

"Fluid milk exports alone rocketed 51.4% higher than the same period last year due to insatiable

demand from China. If milk production does indeed improve later in the production year, Australian exporters will be well positioned to move additional volumes into global markets and potentially provide strong competition for other global dairy suppliers," she adds.

According to an Australian Dairy Products Federation report, Australia's dairy industry is a significant contributor to Australia's economy. The report notes the country's dairy manufacturers generate \$15.7 billion in revenue and contribute \$12.4 billion, or 1%, to Australia's gross domestic product. In terms of employment, the dairy processing industry contributes a total of 70,158 full-time equivalent jobs. **M**

By Fran Howard





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Passing the Torch: Family Prioritizes

Steinhurst Dairy perseveres despite a string of grief and mountains of heartache



John, Eric and Kurt Steiner at Steinhurst Dairy in Creston, Ohio.

The speech “So God Made a Farmer,” given by Paul Harvey in 1978 to the National FFA Organization, tugs at every farmer’s heart. After all, it is both admirable and an honor when a child wants to be just like their parents when they grow up. Ohio dairy farmers Kurt and Robin Steiner can attest to their brimming pride when it was announced over the loudspeaker on senior football night that their oldest son, Christian, would take over the family dairy farm after he graduated college.

Like many farm kids, Christian, along with siblings, Nicole and Zach, were taught the values of hard work, honesty, commitment and sacrifice on their family farm,

Steinhurst Dairy, in Creston, Ohio.

When they look across the landscape of their family farm, Christian and his siblings see bountiful blessings.

“You see the animals when they’re born, raised all the way up,” Christian says. “You see God’s creation every day you work outside, and you work with your family.”

ESTABLISHED 1959

The importance of family runs deep for Christian, who represents the eighth generation of dairy farmers in Wayne County. His grandfather, great-grandfather and great uncles helped established Steinhurst Dairy on their current location in

1959. His father, Kurt, describes his childhood farm as a typical rural Midwestern dairy.

After graduating from Ohio State University in 1988, Kurt decided to head west to California to take a job with Cargill. He worked there for two years before landing another job with a big chemical company, but deep down, Kurt knew Ohio was home. He returned to his family dairy in 1994. At the time, his family was milking 140 cows in a double-six herringbone parlor.

Kurt came back with a team-player attitude and knew he needed

How One Planning



PHOTOS: PURINA ANIMAL HEALTH



Christian and Kurt Steiner enjoy working together on their family dairy farm.

attorney, the Steiner's put together an extensive succession plan that addressed death, buyout of partners, life insurance policies, how long the younger generation would have to work before coming into the farm as a partner and so much more for their family dairy. This conversation is vital for any dairy operation, but the Steiner's would realize just how beneficial it would be for them in the coming years.

HANDLING GRIEF

As if 2009 wasn't hard enough with a lackluster dairy economy, life suddenly came to a halt for the Steiner family on Super Bowl Sunday afternoon when Kurt's father passed away suddenly from a heart attack.

Crediting solid management, where every partner pulled their weight, and a life insurance policy the farm had on their father, the dairy was thankfully able to continue without

additional headaches.

"Our dairy didn't miss a beat as far as keeping things moving forward," Kurt says. "You don't plan for death, but it certainly can happen quickly."

After their father's death, Kurt and Eric became 54% owners and their uncle John, a 46% owner, which was outlined in the succession plan.

In 2016, John had a stroke. He was sidelined for a year, only to return for a few months before undergoing a heart valve replacement. The surgery unfortunately

never allowed him to go back to work on the farm. However, his leadership continues to be appreciated by the partners today.

Just, two months ago, at the age of 52, Eric went in for prostate cancer surgery, returned home, went into cardiac arrest and passed away. Kurt recalls his last words to Eric before his surgery: "I love you. Don't worry about coming back. We will take care of it."

Although Kurt was referring to taking care of the dairy while his brother recovers, a life insurance policy helped take care of the farm. Kurt notes none of his business partners walked off the dairy like everyone had envisioned.

"You're not going to be here forever, so you better have it together," he adds.

SUCCESSION PLANNING ADVICE

Kurt readily admits his dairy farm doesn't have it all figured out when it comes to succession planning. He believes the key ingredient is communication among the partners during the long process.

"If there's no communication, it is never going to work," he says.

Appreciating the younger generation's drive and passion is something Kurt admires.

"Truthfully, I don't think there is a greater joy than watching your kids want to take over what you've established," he adds.

After graduating from Ohio State University - ATI in 2018 with a degree in dairy science, Christian oversees the calf and heifer program as well as fresh cow protocols for the farm.

According to Kurt, the farm's

to be an asset to his father and his uncle John.

"I came back with the mindset I needed to shut up and listen for a couple of years," he says.

Slowly, the Steiner family started to expand their dairy that now sits at 600 milking cows and 1,100 acres of cropland.

Despite the hustle and bustle of farming, the Steiner's took time to pause in 2002 to talk about succession planning and what it would take to bring Kurt and his younger brother, Eric, into the operation as partners. With the help of a family



DAIRY FACTS

 **600 COWS**
in Creston, Ohio

 **8 EMPLOYEES**

>95 lb.
PER COW PER DAY
fat-corrected
milk production
average

culture also plays a part in succession planning because the next generation isn't going to operate and run the

family business the same hours and the same way as the previous. He believes establishing work-life balance illustrates to the younger generation they can achieve the very same balance, too.

"When a kid sees dad was able to attend activities and come inside for supper, this all sets the stage for what's next," he notes. "If the old man is dragging down the attitude of everybody and never taking a break, why would the younger generation want to come back to work in an environment like that?"

It's a blessing, Kurt adds, that Robin came from dairy roots.

"She understood it all from day one," he notes. "Sometimes the spouses who are not from this kind of background watch their friends' spouse join in on all the fun things over the weekend, and if you're

spouse isn't prepared for that, it can be a rough adjustment."

Crediting a solid foundation built on faith and family, the Steiner's have been able to work together on the family farm.

"If you can foster a positive culture in your operation, where members want to be together, then you realize this life is worthwhile," Kurt adds.

Every quarter, the Steiner family gathers for management meetings where no finger pointing is allowed.

"Everyone is expected to come with ideas," he says.

Understanding it is easy to be pulled into different directions and put off conversations for another day, Kurt highly recommends not postponing transition planning.

"It really could simply be too late," he adds.

future goal of the farm?" he asks. "If you figure that out, it makes the whole succession planning a lot easier because if everyone wants it to continue to the next generation, then you just have to figure out how to execute it."

The key component is communication and defining expectations for all members, including non-farming family members.

"Have those uncomfortable conversations," Robin says.

Those conversations the Steiner's executed early on, in addition to open communication, hard work and strong values have allowed Steinhurst Dairy to pass the torch from one generation to the next despite a string of grief and mountains of heartache. **M**

By Karen Bohnert



PHOTOS: PURINA ANIMAL HEALTH

Financial Balancing Act

Why you need a capital expenditure budget

Are you looking to purchase a few big-ticket items for your farm due to higher profitability? Before you increase your fixed assets, define your goals and set limitations — in other words create a capital expenditure budget.

A plan for capital expenditures is simply when and how a business cash flows capital assets, explains David Widmar, economist at Agriculture Economic Insights. The assets can include machinery, facilities, farmland, etc.

To create a plan, Widmar strongly recommends first reviewing past

spending activity. Next, consider your cash flows. This includes debt service payments and non-debt purchases such as machinery leases.

Finally, look ahead to 2022 and address what needs replaced or upgraded and what are all your cash flow obligations?

You can take various approaches to your capital expenditures plan, says Brent Gloy, economist at Agriculture Economic Insights. A few strategies he recommends include:

- Allocate an amount each year.
- Save up to seize an opportunity.



- Layer on investments to push business growth.
- Reduce expenses as you plan for retirement.

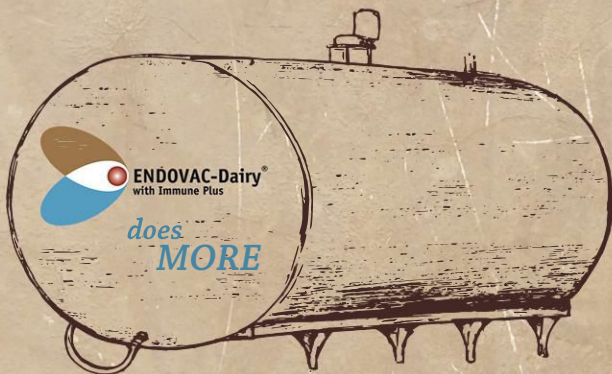
The most important thing you can do is write down your plan, Gloy says. You can always revisit it later and make changes. **M**





By Sara Schafer



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Elizabeth Griffith has been involved in the dairy industry for more than 30 years; she has spent most of that time focusing on people. Her passion is helping companies develop better teams, improve communication and train leaders. Liz has spent countless hours assisting farmers with employee management, communication and conflict resolution.

✉ liz@encore-consultants.net

Invest in the Next Generation



You invest in your business and you invest in your retirement. Have you considered investing in the future leadership of your farm?

It's critical to invest in your future leaders early on. Successors who are prepared have a higher chance of carrying on the family business.

If you're the owner, get real. Ask yourself, how long do I want to continue to run our business? What if something happens to me that takes me out of the business before I'm ready? Do I have a potential successor? And, if so, have I prepared that successor?

FRANK CONVERSATIONS

Find out who's interested. Someone from the younger generation might have expressed interest in taking over from you, but you need a commitment. If you have more than one child, especially more than one who has worked in the business, have a frank discussion about your wish to ease yourself out of the business.

Use your judgment. No one knows their kids like a parent. Ask yourself if any of the family members who have expressed interest in succeeding you truly have what it takes to be a business owner. Take your blinders off and truly consider the following:

- Do they love the business?
- Have they taken the opportunity to find work off farm to gain insightful experience?
- Can they manage those critical relationships?

ALIGN VALUES AND VISION

Most importantly, choose the best person suited for the job. It's not about making everybody happy or every person a leader, it's about planning for the success of the business and their role in it.

Once you have selected a potential successor or team of successors, spend time with them explaining the history, culture and values. Work together to make sure your values and vision align.

- Prepare them by enrolling them in educational seminars, programs and peer groups.
- Define their roles and responsibilities on the farm.
- Outline how they will be held accountable.
- Utilize job rotation to provide experience in all areas of the farm.
- Provide leadership roles now to see how they progress.
- Provide feedback.
- Be a mentor and coach.
- Be open for questions.
- Work with them on communication skills. The how, when and what to communicate. This is key to a leadership role.

Zig Ziglar once said, "Investing in the future leadership of your farm entails time, thought and training. Just like any investment, the earlier you start the more it has time to grow and develop. You don't build a business, you build people, and then the people build the business." **M**

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THE DAIRY FARMER

DOUG WOODGER
Rockwood Farm
Granville, Massachusetts

“We’ve always been tight on feed, and we have all different soil types; so Enogen corn seemed to fit right into our ballpark.”

On his second-generation dairy farm, Doug Woodger needs a silage product he can count on from seed to feed. “We’re milking 400 cows three times a day,” said Woodger. “We’ve always been tight on feed, and we have all different soil types; so Enogen corn seemed to fit right into our ballpark. Specifically, I felt Enogen hybrids stayed green longer and withstood the stress of the drought.”

When it comes to how his cows take to the product, Woodger was quick to first point out how

fast Enogen corn goes from harvest to feed. “It was about 10 to 14 days right after we finished chopping, and it was already cooled,” he says. “It wasn’t heating up, no steam. And there was no off feed. Nothing. The cows went right at it.”

Woodger is also impressed with how Enogen corn is making his cows more productive, which makes his overall business more productive. “I haven’t seen too many really heavy cows. Basically, when it goes through the cows for us here, it works.”



What else makes Enogen different?

Enogen corn can be harvested as silage, grain or high-moisture corn, making it a very flexible product. And in some cases, the full potential of its benefits can be seen in as little as 45 days.



“Obviously, we’re always looking for more ways to make our cows more efficient and our operation more profitable.”

DARREN COFFEY



THE DAIRY FARMER

DARREN COFFEY

Rolling Acres Dairy Farm
Allegan, Michigan

Darren Coffey is a fifth-generation dairy farmer who, along with his dad and two brothers, runs Rolling Acres Dairy Farm. “We milk 900 cows, and we farm 1,600 acres of ground with 1,000 of it being corn,” says Coffey. “Obviously, we’re always looking for more ways to make our cows more efficient and our operation more profitable.”

Implementing Enogen corn into their operation was a quick decision for Coffey and his team, so they had to start their cows on it right away. “We didn’t let it ferment. It was straight out of the field and right into the cow,” he recalls. “Because we started it so fast, we thought the milk production was going to drop, but it didn’t. It was just as consistent. That was a good surprise.”

Coffey was just as pleased with the efficiency of Enogen corn. “We fed less dry matter per cow, so that was a huge savings and a definite reason why we’re extremely happy with Enogen corn from a financial standpoint.”

From the very beginning, Coffey knew Enogen corn silage was the right choice for his operation. “Straight out of the chopper — it wasn’t even packed — and the cows didn’t know we switched. From there, we knew we had a winner.” He’s also clear on what advice he’d give a dairy farmer who’s considering making the change. “I highly recommend it because everything just runs smoothly with Enogen corn. Plus, we’re not spending as much on feed. Those two improvements really sum it up for me.”


MANY SOURCES, ONE CONCLUSION: Enogen corn is making a measurable difference in the dairy industry. So, write your own story. Enogen hybrids are offered exclusively through Syngenta Seeds.

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Paul Dyk, MSc, PAS provides independent nutrition and management consulting through GPS Dairy Consulting, LLC to dairy clients with a focus on listening to and meeting his client's goals.

 pauldyk@gpsdairy.com

Age to Maturity: A Genetic Wish List

Over the past 50 years, the average age for pullets to begin laying eggs to 50% production has improved from 24 weeks to 20 weeks. They reduced age to maturity to begin the productive cycle of their life earlier. Part is due to nutrition and lighting, but genetics played an important role.

In the dairy industry, the age to maturity has changed very little. Yes, now many Holstein heifers calve between 22 and 24 months of age. If we dip below much 22 months, we have heifers that fall through the cracks, but there are some heifers that do not; there are outliers that seem to do just fine calving earlier.

TARGET BREEDING

A dairy cow gets close to maximum size around 48 to 54 months. In a 2015 study, Canadian researchers put the mature size of Holsteins at 1,562 lb. Using 55% of mature weight as a target for breeding, that would lead to a target of 859 lb. at 13.6 months. Current literature points out that when the mature body weight is 1,650 lb., we might need to breed at higher weights (908 lb.) with the same minimum age floor. Even though she hits 850 lb. much earlier than 13.5 months, we likely need to wait. She isn't physiologically mature. But this is not true for all breeds. The Jersey reaches mature size earlier. In the same study, it showed Jerseys reach the target of 55% maturity weight by 12.6 months; she can safely calve a month early.

LOWER AGE TO MATURITY

Hasn't this changed over the past 100 years in the dairy industry? In 1934, an Iowa bulletin documented weights of cattle from various breeds. The Holsteins peaked at 1,345 lb. and reached 55% of mature body weight by 14 months. That's not far from the 13.6 months in 2015. Smaller cows grew along a similar growth curve. In the same bulletin, Jerseys and Ayrshires showed the same trend as modern cows. Jerseys were faster and Ayrshires were slower to the target breeding date. In 1954, another bulletin showed Holsteins were reaching larger mature weights (1,410 lb.) but age to target breeding weight was again 14 months.

Could we lower the age to maturity (ATM) and have a lower age to first breeding? Could we take our outliers and make them mainstream? Could we calve Holsteins at 20 months with no one falling through the cracks? Maybe, and that's on the wish list.

Should we look at outliers that do well at a 20-month calving age? If we could shave off 60 days to first calving, that could mean \$150/head in savings (\$2.50 per head per day). Would this be enough to outweigh genetic progress on other production traits?

A wish list is of course something for the future. Please remember, I don't think we can calve all Holstein heifers at 20 months today; the genetics aren't there. But, the challenge goes out to the genetics industry: can we do this for the future? **M**



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The Great Resignation

Don't let it distract you from what matters most

When it comes to recruiting new talent, today's hires want to know where they are going next. Twyla Stevens, director of human resources at Carthage System, says new employees no longer

want to just come in and work. They want to know what's next.

Stevens says, "2021, the year known as the 'Great Resignation' has made recruiting challenging."

Stevens offers steps to help.



1. TALENT ACQUISITION

First, define your roles. Then determine how to best attract and identify potential candidates.

2. SKILLS TRAINING

Determine what skill sets your team needs to be successful. Then, implement training to build the team's confidence.

3. DEVELOPMENT

Leadership is the bridge that fills any skills gap. It's finding leaders who can hold people accountable. Focus on the things you want to reward and recognize.

4. MANAGEMENT

Performance management is determining how you will reward behaviors you want to replicate within your farm. Stevens warns if you wait once a year to talk to employees, you've missed the boat.

5. ENGAGEMENT

"We've all had a team where everything clicked," Stevens says. "That's engagement." It results in a team that will perform.

"Successful organizations know that a well-defined people strategy is actually the cornerstone of their organizational strategy," she says. **M**

By Jennifer Shike

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Productive Lactations Begin at Dry-Off

By John Champagne, D.V.M., M.P.V.M.
Cattle Technical Services
Merck Animal Health



Proper use of core-antigen vaccination has a tremendous impact on udder health in the next lactation.

More than 50% of clinical coliform mastitis cases that occur in the first 100 days in milk originate during the dry period.¹ That's why a core-antigen vaccine like Bovilis® J-5 should be given at dry-off.

Vaccine endotoxin levels correlate with safety, not efficacy.

Core-antigen vaccines help a dairy cow's immune system recognize coliform bacteria, such as *Escherichia coli* (*E. coli*), when they invade the udder. The benefits of vaccination, which occur by enhancing the cow's immune response, can include reductions in mastitis severity, milk loss, pregnancy loss, culling and death associated with *E. coli* infections.

Why vaccination works

In the udder, Gram-negative coliform bacteria can reproduce rapidly with each bacterium containing endotoxin within their cell walls. Endotoxin can produce a cascade of detrimental inflammatory responses in the cow. The ability of the cow's immune system to quickly recognize, destroy and remove these bacteria plays a significant role in reducing the negative outcomes from a coliform bacteria infection.

Vaccination increases antibody numbers. Therefore the cow's immune system is better able to destroy and remove

these bacteria before they cause further local damage to the udder. This reduces the potential for systemic disease.

Core-antigen vaccines contain levels of endotoxins, which can be the result of the manufacturing process. That's why it's so important to evaluate the amount of endotoxin present when selecting a vaccine. Bovilis J-5 is a Gram-negative core-antigen vaccine that's formulated to provide adequate antigen exposure for an effective antibody immune response while minimizing the potential adverse endotoxin loading associated with vaccine endotoxin levels.

Studies show Bovilis J-5 has no negative effect on milk production.² And when compared to similar products, Bovilis J-5 had the lowest endotoxin levels (EU/mL) per bottle; it is 15 times lower than the U.S. Pharmacopeia recommendation.³

Reducing *E. coli* mastitis with Bovilis J-5

It is important to note that vaccine endotoxin levels correlate with safety, not efficacy. Research on efficacy found the use of Bovilis J-5 reduced the rate of clinical coliform mastitis 2.4-fold compared with the use of Enviracor® J-5 during the first 100 days of lactation.²

Rates of clinical coliform mastitis were higher in third- and fourth-lactation cows compared with first- and second-lactation cows.² While not restricted to older cows, the greatest

difference in Bovilis J-5 efficacy over that of Enviracor J-5 was in cows that have calved at least twice. This is significant because older cows during the first months of lactation are at greatest risk to clinical coliform mastitis caused by *E. coli* and *Klebsiella* species.⁴

	BOVILIS® J-5	ENDOVAC-DAIRY®	ENVIRACOR® J-5	J-VAC®
Dose	5 mL	2 mL	5 mL	2 mL
Mean EU/mL*	44 ^a	85,156 ^b	5,936 ^c	351,636 ^d

^{a,b,c,d} Means with different superscripts differ ($P < 0.05$).

IMPORTANT SAFETY INFORMATION

This product contains oil adjuvant. In the event of accidental self-injection, seek medical attention immediately. For additional information, see the product label.

- Bradley JA & Green MJ. A study of the incidence and significance of intramammary enterobacterial infections acquired during the dry period. *J. Dairy Sci.* 2000;83(9):1957-1965.
- Field trial to compare efficacy of Bovilis J-5 and Enviracor J-5 vaccines against clinical coliform mastitis during early lactation. Merck Animal Health technical bulletin, 2020.
- Comparison of endotoxin concentrations in Bovilis J-5 with those in three commercially available Gram-negative, lipopolysaccharide core-antigen vaccines. Merck Animal Health technical bulletin, 2020.
- Hogan JS, Smith KL, Todhunter DA, Schoenberger PS. Field trial to determine efficacy of an *E. coli* J5 mastitis vaccine. *J. Dairy Sci.* 1992;75:78-84.



To learn more,
contact your veterinarian
and visit BovilisJ5.com.

A Trifecta of Pressures Weigh on Dairy Producers

Inflation, higher input costs and lack of labor are top concerns

A dairy with a track record spanning four decades is where you can find Tom Crave, part-owner of Crave Brothers Farm in Waterloo, Wis.

“Almost all the milk we produce goes to our cheese factory and is made into cheese and mass distributed throughout the United States,” Crave says.

Striving for efficiency, the 40-year-old dairy recently got an upgrade, with a rotary parlor.

“Last year, we built a new milking parlor that’s much more efficient,” Crave says.

The decision to invest in infra-

goods, fertilizer this coming spring, seed, machinery, parts repairs; everything is going up, even fuel,” Crave adds. “We’ve had a respectable milk price this past year, but inflation is gouging into that.”

Crave isn’t alone in battling the growing concerns about a spike in costs, as inflation and rising costs weigh on dairy farms across the country right now.

“I would say a lot of farmers if they’ve got their cowherd, they’re going to try to maintain that and try to work through this period of high grain prices, feed prices and hay prices,” says Tanner Ehmke,

“Changing the national herd is like turning an aircraft carrier around in the ocean, it takes seven miles of open ocean to turn a big ship around, and that’s what it’s like to drop our herd size,” says Jim Ostrom, partner of Milk Source “It takes a lot of pain in order to send enough signals to the marketplace to drop back.”

Milk Source, in Michigan, Missouri and Wisconsin, is watching the costs angle closely.

“We’re feeling substantial pressure from feed inflation, and I believe every producer in the country is feeling it,” he adds.

The higher costs are eating into outlooks, and milk prices have backed off the last year’s highs. The softer milk prices aren’t helping cushion the rise in costs.

“We raise a lot of our own feed, but even when you do that, that’s still generally 40% to 50% of your feed costs,” Ostrom says. “So, a 30% inflation on half your feed cost is still out of inflation.”

“Changing the national herd is like turning an aircraft carrier around in the ocean.”

—Jim Ostrom, partner, Milk Source

structure on his dairy farm is one he doesn’t regret.

“It’s wonderful,” Crave says. “It’s very cow-friendly and milker-friendly. The employees love it.”

INCREASING INPUT COSTS

A year later, investments such as the one on Crave’s farm are coming at an even higher cost, as is nearly every other input on dairy farms.

“The biggest one that I worry about is inflation. The cost of

lead economist with CoBank. “So I wouldn’t expect it would be a sharp drop by any means, but I would say it’s definitely steady to declining as a way I would describe the future cowherd.”

DECLINING HERD NUMBERS

Recent USDA reports show overall cowherd numbers starting to taper off, which is a sign of changing dynamics in the U.S. dairy industry.

LACK OF LABOR

The concerns about waning margins aren’t just sitting with sourcing feed, but the labor woes that have plagued the dairy industry for years.





“Labor is a situation all over the country, as we all know. It’s been in the headlines, and agriculture, unfortunately, is at the forefront of that,” Ehmke says. “We’re always labor tight in agriculture, that story never seems to go away. I would say in dairy, it’s a situation of trying to find immigrant labor. Immigration is down a little bit, numbers are down a little bit for dairy, it’s going to be a situation of can you find somebody locally in a very rural area.”

It’s not just capturing the milk on farms being impacted by a lack of labor, but also processing it into dairy products.

“Some processes are running shorter hours, and especially in the Northeast, that’s resulted in some milk being dumped more so than we had seen pre-COVID,” Ehmke says. “And unfortunately, this situation isn’t going away anytime soon. This forces the question of automation forces, and the question of do we expand? If so, how do we expand? It really brings technology to the forefront.”

As costs continue to rise, the dynamics in dairy continue to change. That’s why some producers say the situation farmers are currently facing could expedite consolidation in the dairy industry. **M**

By Tyne Morgan

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Aidan Connolly is CEO of Cainthus, an Irish artificial intelligence company, using computer vision to monitor animals. Prior to joining Cainthus, he spent 25 years in innovation and technology at Alltech.

 info@cainthus.com

Is Data the New ‘Oil’?

Milk producers are increasingly aware of the value of the data on the farm. Just as oil flows from wells and milk from cows, it seems data has the potential to inform or overwhelm the producers with more information than they can comprehend.

Dairy producers have had a series of platforms to choose from, including:

- Dairy Comp is the original of the species and the largest and first of its type in the dairy herd management software space. It is the first to truly offer producers the ability to collect and manage data on milk and cow health at an individual level. Industry estimates that more than 60% of the U.S. herd are currently using Dairy Comp, which in turn has driven the desire of other new technologies.

- Amelikor from Provi, Utah, in cow numbers by my estimates is the second-largest herd management software in the U.S. market and is widely used in herds west of the Mississippi. They have four products for herd management (DHI-Plus), feed management (EZFeed), commodity tracking and dairy records management.

- BoviSync is an award-winning platform, and its growth is fueled by its use of cloud-based software and innovations, such as its ability to aggregate and analyze data for groups of cows, allowing management of cows at pen level.

- Vyla, a new platform backed by Nestle, Land O’Lakes and Lely and supported by other industry players. Offering something like a Facebook for farmers makes it easy to integrate information from any system in a single open app, including feed management, parlor software and combine milk prices and weather.

- Mydairydashboard.com owned by Dairy.com has a similar concept, bringing together farm, market and weather data under one roof.

- The MILC Group has continued to add more and more data streams under the umbrella of their ONE platform, to manage feeding and sensor alerts for milking facilities.

DATA-DRIVEN FUTURE

If farms don’t capitalize on the increasing availability of information flows from sensors and other novel technologies on the dairy, data platforms could become a bottleneck preventing livestock from achieving the promise and profitability of smart precision farming. Dairy farmers, especially the largest producers, recognize data-driven farming could provide multiple benefits: optimizing inventory, precise feed formulation and reducing feed costs, enabling better milk production through precision nutrition, responding better to consumer demands. What the milk supply

“What the milk supply chain needs is for all moving parts to work symbiotically through shared data.”

chain needs is for all moving parts to work symbiotically through shared data. This is better known as data interoperability in the technology world. Data interoperability allows different systems to communicate their data with each other on a shared interface. It allows systems to not only create, exchange and consume data but create shared expectations and understanding of the data presented.

PRODUCER BENEFITS

In healthcare, we have seen how patients' medical records might be shared by many doctors, labs and insurers within a network. Patients benefit from the convenience of not having to provide lab results and recount medical history when visiting a new doctor within the network. More generally, data interoperability prevents one company from monopolizing the data, incentivizes the players involved to improve their products given the competitive nature of the shared platform, and results in a better result for the end-user. For the food supply chain, this means that instead of multigenerational relationships, external publications and word-of-mouth communication, data from raw material analysis to animal performance will be tracked and communicated throughout the entire process making the supply chain integrated, not segregated.

Users of Facebook and Google demand increased transparency and accountability for big tech companies. Dairy producers need to find ways to respond to consumer preferences and deliver better products while remaining an integral element of the food supply chain.

Questions about the future of dairy data? Leading food companies potentially might invest or take stakes in leading data players. How soon before Amazon, Google, Apple, IBM or Microsoft decide they want to be part of the dairy data 'land grab' that might ensue.

How do farmers benefit from this? Consumers accept sharing their emails, their location and travel data with big data companies in return for free and valuable services. How can producers gain from their willingness to share data?

Is dairy data the new oil? The choice of data platform is yours, but just like landowners sitting on reserves, we might not know its real value until we allow others in the supply chain to drill into it. **M**

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One-On-One With DMI CEO: A Legacy Of Unity

Tom Gallagher to step down from national checkoff after three decades



Tom Gallagher will retire from his three-decade tenure as chief executive officer with Dairy Management Inc. (DMI) to embark on other opportunities. The announcement also revealed the board of directors declared Barbara O'Brien, president of DMI and CEO of the Innovation Center for U.S. Dairy, as the next CEO for national checkoff.

"Barb has worked with me for 21 years and has great respect in the industry, with the CEOs of every dairy company, and she has been part of every major decision I've had to make," Gallagher states.

A delivered mission of increased sales and trust is the legacy the longtime CEO says he hopes to leave behind. During Gallagher's stint, he has overseen the creation of management of several organizations including U.S. Dairy Export Council, The Innovation Center for U.S. Dairy, Newtrient, National Dairy Council, Global Dairy Platform and GenYOUth.

STRONG VALUES AND UNITY WILL PROPEL DAIRY AHEAD

Gallagher says he is most proud of the relationships he has made with dairy farmers during his 30 years. "This is always going to be an important part of my life, and dairy farmers will be an important part of my life from the lifelong friends I've made," he says.

DMI chair, Marilyn Hershey credits Gallagher's vision and leadership taking DMI to where it is today.

Gallagher was raised by his father, who was a Chicago fireman, along with his mother, who was a waitress. "The fireman values and the waitress values include waking up every day to do your job. It's about honest, hard work and is full of integrity," he shares. "That's why I've been able to stay here this long as I'm not going to work with a company that doesn't align to my value system."

Beginning with DMI in the early 1990s, Gallagher states he came into the dairy industry that was 'very fractured.' "Yes, I think there is going to be the push and pull of prices," he says. "However, on all the things I feel the industry is very coordinated."

Confident in the great organizations that can help dairy farmers, Gallagher does not minimize the challenges U.S. dairy farmers are faced with.

"You've got a pricing system that doesn't work. It's 90 years old, and it was conceived at a time when there was no international market there," he says. "Through unity farmers must come up with an agreement. It's not hard to come up with a plan. It is hard to get an agreement to a plan." **M**

By Karen Bohnert





Liberty Hill Farm

@libertyhillfarmvt

Tongue out Tuesday means a cowlick for Leo! Just part of the job around here! →



IN CASE YOU MISSED IT:

- **CNN:** People Who Eat More Dairy Fat Have Lower Risk of Heart Disease, Study Suggests.
- **Fast Company:** How Danone is Trying to Design the Most Milk-Like, Plant-Based Milk
- **The National Interest:** America Had Better Get Used to Rising Inflation



U.S., CHINA CONTAINER SHIPPING RATES

New data shows shipping rates between the U.S. and China are dropping despite backlogs at U.S. ports and increase shipping rates.

Data provided by Shifl shows China/U.S. spot freight rates, for shipping a 40" container from China to Los Angeles, dropped by \$9,000.

Port of Los Angeles has seen a 30% increase in cargo volume so far this year. That's as exports from the Port of Los Angeles dropped 23% in August.

U.S. agriculture is impacted because of record-high shipping rates. Also some shipping lines are working to get empty containers back to factories in Asia as quick as possible.



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Why is comfort so crucial?

Drying off is the most important phase of the lactation cycle because it prepares the cow and her udder for the next lactation. Traditionally, this has been achieved through manipulation of diet and intermittent milking. However, it is often a stressful and uncomfortable period for dairy cows due to:

- Engorgement caused by accumulation of milk in the udder in the absence of milking
- Increased intramammary pressure, which can cause discomfort and milk leakage, leading to a decrease in lying time and an increased risk of mastitis.

BOVIKALC DRY helps maintain cow comfort at dry-off without the implementation of any additional management changes.

Talk to your Boehringer Ingelheim representative to learn more.

¹ Maynou and Elcoso, et al. Effects of oral administration of acidogenic boluses at dry-off on performance and behavior of dairy cattle. *J Dairy Sci* 2018;101:1-12.

² Hu and Murphy. Dietary Cation-Anion Difference Effects on Performance and Acid-Base Status of Lactating Dairy Cows: A Meta-Analysis* *J Dairy Sci* 2004 87(7):2222-2229.

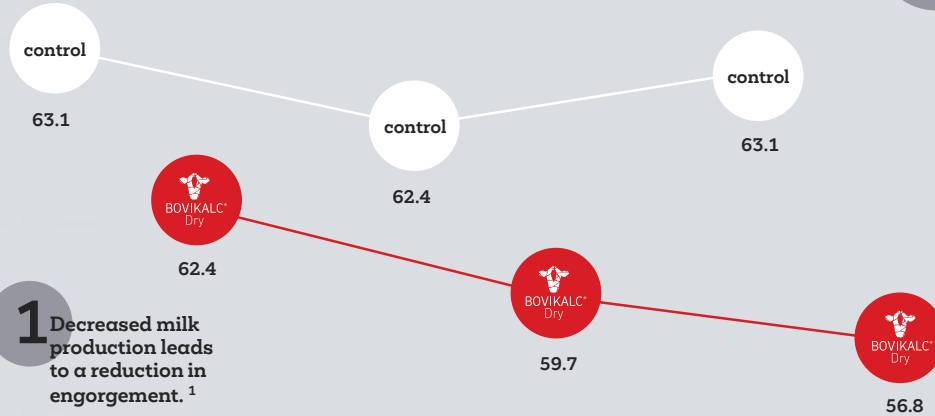
³ Gunnink, et al. Alkaline pH activates the transport activity of GLUT1 in L929 fibroblast cells. *Biochimie* 2014 (99)189-194.

⁴ Zhao and Keating. Expression and Regulation of Glucose Transporters in the Bovine Mammary Gland. *J Dairy Sci* 2007(90)E76-E86.

Impact of BOVIKALC DRY on milk production (lbs)

3 WAYS

Bovikalc® Dry improves animal well-being during dry-off.



1 Decreased milk production leads to a reduction in engorgement.¹

Prior to bolus administration

24 hours after bolus administration

48 hours after bolus administration

Evolution of udder pressure after dry-off¹

2 Control >

Lower udder pressure diminishes the risk of milk leakage.¹



Bovikalc Dry >

71.2 Pressure in Pa

24 hrs

BOVIKALC DRY



61.3 Pressure in Pa

60.2 Pressure in Pa

48 hrs

BOVIKALC DRY



54.1 Pressure in Pa

54.3 Pressure in Pa

72 hrs

BOVIKALC DRY

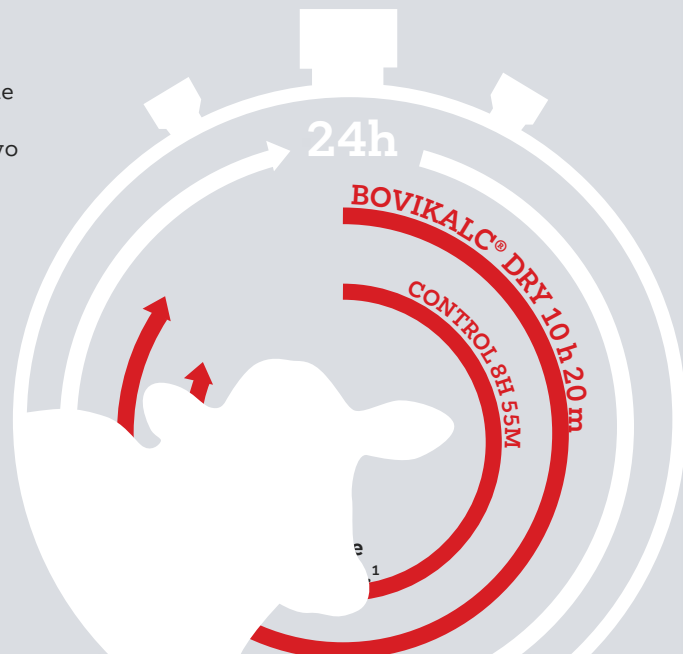


49.7 Pressure in Pa

How it works.

BOVIKALC DRY is delivered via two boluses at dry-off. It helps to reduce the amount of milk produced at the time of milking cessation by inducing a slight and temporary metabolic acidosis. The reduction is accomplished via two assumed pathways, each resulting from the metabolic acidosis. The pathways are:

- A reduction of the cow's appetite, which causes reduced feed intake, leading to a decrease in available net energy, which results in reduced milk production.²
- A reduction in glucose transport into mammary alveolar cells due to metabolic acidosis, which decreases lactose synthesis and causes a reduction in milk production.^{3,4}





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