INDUSTRY REPORT: SECOND EDITION

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YOUR LINK TO BEEF-ON-DAIRY STRATEGIES

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LAURENCE WILLIAMS | Beef-on-Dairy Development, Purina Animal Nutrition

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TELLING THE STORY OF BEEF-ON-DAIRY CATTLE ACROSS THE SUPPLY CHAIN

With an estimated 12-15% of the annual fed slaughter being beef-on-dairy, this group of cattle is becoming foundational in meeting consumer demand for premium beef.[1] A year-round supply of quality cattle offers an opportunity to deliver consistent beef demand among consumers. The opportunity exists to collaborate across the supply chain and improve an already important part of the fed slaughter.

Beef-on-dairy calves are proving their worth by consistently achieving quality traits, particularly in marbling. With native beef cattle numbers remaining low and demand for high-quality beef holding strong, there's growing opportunity and a responsibility to raise these crossbreds with intent. That means beginning with the end in mind and using every tool available, from genetics to nutrition to on-farm management, to ensure they reach their full potential at harvest.

Purina Animal Nutrition became an early leader in the beef-on-dairy space because we saw the moment as both a challenge and an opportunity for producers and packers. This report is a commitment to sharing industry knowledge, connecting key players across the value chain and continuing to optimize animal performance through science-backed nutrition programs like PrimeStart™.

Purina is continuing to grow understanding of how to better feed and manage these animals with applied research and the adoption of the PrimeStart™ program. At the same time, one-on-one work with producers and calf raisers – paired with industry conversation from academic partners like Texas Tech University and West Texas A&M University to brands like *Certified Angus Beef*® – has given Purina perspective on how to improve the story of these cattle.

These are great cattle with great value. Purina is proud of the research we've done with this group and the work that's been accomplished across the supply chain. As an industry, we can do a better job of managing these calves to ensure they don't have a bad day because a single setback in early life can impact their performance all the way to harvest. The beef-on-dairy effort is about getting the supply chain around the table to connect the dots and bring higher quality animals through the system and ultimately to the consumer.

LAURENCE WILLIAMS
Beef-on-Dairy Development, Purina Animal Nutrition

Laurence Williams has been engaged in a beef-on-dairy development role for Purina Animal Nutrition since the beginning of 2023. He received a B.S. in animal science from Colorado State University.

PATRICK LINNELL | Director of Market Research, CattleFax

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BEEF-ON-DAIRY OUTLOOK: A MATURING MARKET WITH STEADY VALUE AND RISING EXPECTATIONS

After years of fast-paced growth, the beef-on-dairy sector is entering a new chapter, one marked by steadier numbers, tighter margins and a sharper focus on quality. What started as a promising opportunity to add value to dairy herds has matured into an essential and more predictable part of the U.S. beef supply chain.

Transitioning from growth to maturity

The practice of breeding dairy cows to beef sires surged initially, offering a solution to add value to non-replacement calves while also reducing dairy replacement surpluses. However, the initial enthusiasm appears to have outpaced replacement heifer needs. Many dairies may have overcorrected, prioritizing beef genetics at the expense of maintaining a healthy pipeline of replacements.

As a result, the sector has reached a practical ceiling. That's not to say the segment has lost value — that's far from it. Instead, we're seeing producers and supply chain stakeholders move from rapid growth into a phase where efficiency, animal performance and supply chain alignment matter more than ever. The dairy industry is seeking a balance between producing dairy replacement heifers and beef-dairy cross calves.

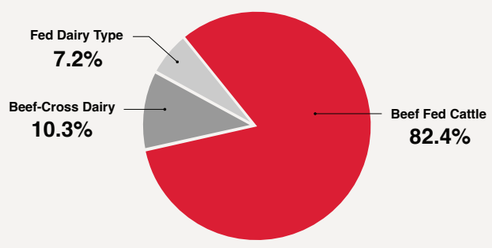
Market outlook: Tight supply, strong demand

Looking out over the next several years, the value of beef-on-dairy cattle will continue to support overall beef supply. Beef cow herds still are recovering from a multi-year cattle population decline, driven by tight margins and persistent drought.

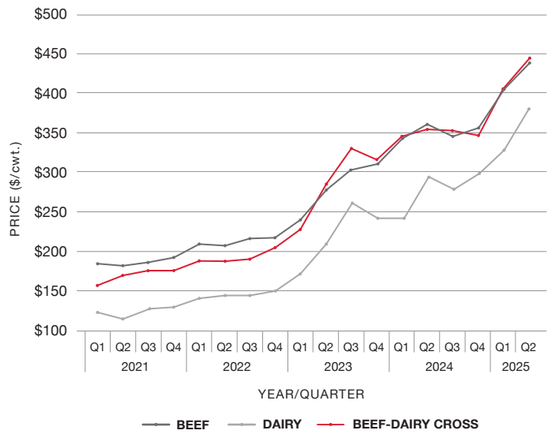
Current projections indicate that beef-on-dairy crossbred calf volumes have likely reached their peak, with a gradual decline of 300,000 to 400,000 head expected in the coming years. As the dairy industry seeks to amend the shortage of replacement heifers, breedings for beef-on-dairy calves were down approximately 5% in 2024, setting the stage for declining numbers ahead.

Domestic and global beef demand remains remarkably strong. Despite economic headwinds and inflation, consumers continue to prioritize beef, especially when job markets are strong. That continued appetite helps support the role of beef-on-dairy cattle in the supply chain.

2025 estimated U.S. fed cattle slaughter

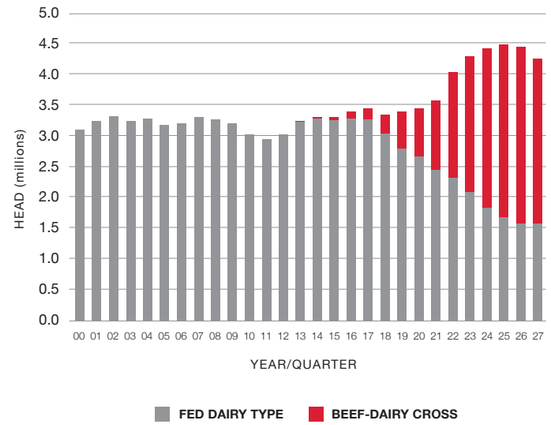


Quarterly 400-450 lb. steer calf prices



Source: Superior, Overland, CattleFax

Estimated U.S. dairy-influenced fed slaughter



Source: USDA, CattleFax

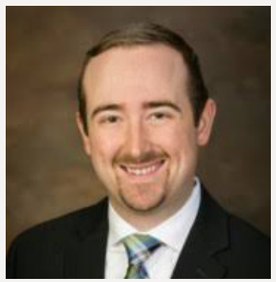
A narrowing pricing gap reflects confidence

The price spread between beef-on-dairy calves and native beef cattle is narrowing significantly. Three years ago, beef-on-dairy calves were sold at steep discounts. But that's changed, thanks in large part to better genetics and smarter breeding decisions. Genetic suppliers have zeroed in on beef sires that are well suited for dairy cows. And, producers are making more targeted selections.

The result? Stronger, more consistent cattle in which feedlots and packers are increasingly confident in. While there's still a small discount compared to native beef cattle in some weight classes, it's far less dramatic and often offset by the reliability and feedlot performance of these crossbred cattle.

The future: Value over volume

As the beef-on-dairy segment matures, it's clear that the market's next phase will require more strategic thinking and adaptability from producers. While market growth may be slowing, the focus has shifted from volume to value. The future of this market will be shaped by those who can produce high-quality, efficient animals that align with the evolving needs of packers, feedlots and consumers.



PATRICK LINNELL
Director of Market Research, CattleFax

Patrick Linnell is director of cattle market research and analysis at CattleFax. He leads supply and price forecasting, helping producers manage risk in volatile markets. Patrick holds bachelor's and master's degrees from Colorado State University, where he judged meats and livestock and focused his graduate research on fed cattle price forecasting. He joined CattleFax in 2018. Raised in Hermiston, Oregon, Patrick comes from a commercial cow-calf and registered Red Angus background and was active in 4-H and FFA.

RUTH WOIWODE, PH.D. | Assistant Professor & Animal Behavior and Well-Being Extension Specialist, University of Nebraska-Lincoln

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RAISING BEEF-ON-DAIRY CATTLE WITH INTENT

As the use of beef genetics in dairy herds becomes more common, the question facing the industry isn't whether we can raise beef-on-dairy calves at scale – it's how we raise them, and why. Raising these calves "with intent" means approaching their care not as a byproduct of other systems but as a deliberate process with clear goals, ethical foundations and human connection. It's about doing right by the animal, the people involved in their care and the food system on which we all rely.

BEGINNING WITH THE END IN MIND

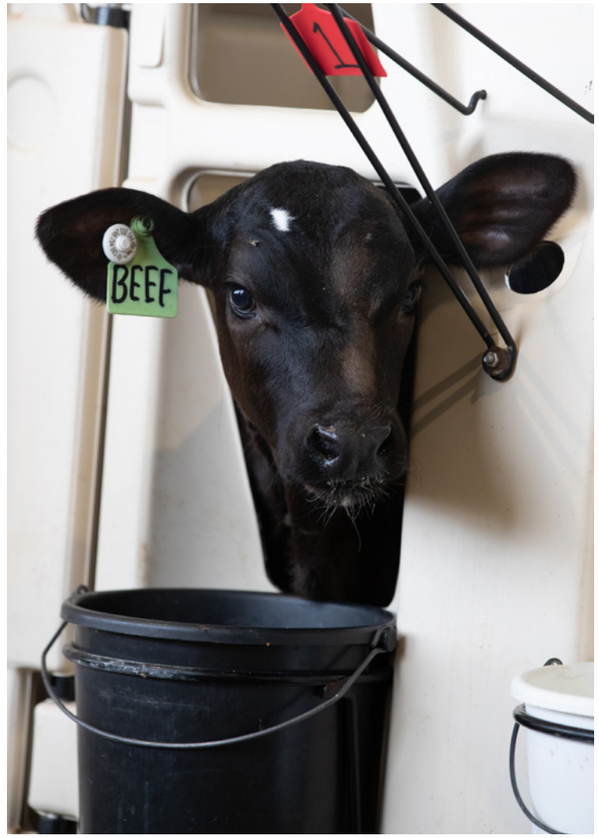
Calves raised with intent as part of a planned system have been successful. This starts with:

CLEAR OUTCOMES
Understanding the expected endpoint (terminal beef animal).

DEFINED PROTOCOLS
Feeding, housing and health programs matched to those goals.

STRATEGIC COORDINATION
Seamless transitions between dairy, calf ranch and feedyard partners.

Without intentional planning, calves fall through the cracks by underperforming in productivity, getting sick or failing to meet quality expectations. Raising with intent helps close those gaps.



Matching management to the calf

Calf care is complex, and providing workers with frameworks to support them in delivering the best care possible is critical. Needs of beef-on-dairy calves can be described by the following categories:

NUTRITION
Ensuring calves receive nutrients critical to their growth and health.

ENVIRONMENT
Supplying thermal comfort and physical protection from the elements, predators, etc.

HEALTH
Providing prevention and treatment of injury and disease.

BEHAVIOR
Offering ability to express natural behaviors.

MENTAL STATES
Ensuring that calves don't experience distress or suffering, offer pain management.

For example, while each of the categories described above are essential for healthy, thriving calves, their needs could not be met without the people who devote countless hours to this work. Excellent calf care requires people, and the workforce trusted with important work also require support. Workers need training, tools and a clear understanding of not only how to consistently follow calf care protocols, but they also need to know *why*. When teams understand the "why" behind the work, attention to detail and animal wellbeing improves.

Every decision counts

The beef-on-dairy sector exemplifies the dedication of the industry to adapt to meet consumer demands for high-quality beef that is raised ethically and sustainably. Yet consumer pressures continue to evolve, offering an opportunity to elevate standards of care across the industry.

The standard: *Are we helping calves thrive?* Stewardship means more than meeting minimum requirements. It means designing systems that support full development – nutritionally, behaviorally and socially – anticipating the expectations of a marketplace that increasingly values both animal care and transparency. That might mean reevaluating how we define adequacy: not just survival, but satiety; not just prevention, but promotion of welfare

Raising beef-on-dairy cattle is not about overhauling tradition. It's about applying what we know with purpose.

RUTH WOIWODE, PH.D.
Assistant Professor & Animal Behavior and Well-Being Extension Specialist, University of Nebraska-Lincoln

Dr. Ruth Woiwode is an extension specialist and assistant professor of animal behavior and welfare at the University of Nebraska-Lincoln. Her work focuses on handler skill, safety, and animal welfare. She holds PAACO certifications across multiple livestock sectors and has trained auditors, developed protocols and provided handling training nationwide. Dr. Woiwode serves on several advisory boards, including PAACO and the UNL Beef Innovation Hub, and chairs the 7th International Symposium on Beef Cattle Welfare.

TOM EARLEYWINE, PH.D.
Director of Young Animal Nutrition, Land O'Lakes

MICHAEL STEELE, PH.D.
Professor, Department of Animal Biosciences, University of Guelph

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WHY NOW IS THE TIME TO INVEST IN BEEF-ON-DAIRY NUTRITION, ESPECIALLY FROM A LONG-TERM REPUTATION STANDPOINT

With beef-on-dairy calf prices reaching record highs, producers have a unique window to turn short-term demand into long-term value. Sustaining that value requires more than good genetics, it means better nutrition and management, especially in the calf's first weeks of life. As Drs. Michael Steele and Tom Earleywine explain, what we feed – and when – can help shape everything from carcass consistency and quality to market reputation.

Why is now the right time to invest in beef-on-dairy cattle, especially from a long-term reputation standpoint?

Dr. Steele: 2025 prices are historically high; $1,000-1,500 Canadian for a newborn black calf. But without better nutrition and management, the value may not remain high. We've made big strides in genetics, but we're behind in early-life care, particularly in colostrum feeding, milk replacer nutrition, grain transitions and post-weaning nutrition. These phases shape long-term resilience, performance and carcass value.

We also have more control over methane emissions because cow-calf operations produce most of the methane in the beef industry. And unlike the conventional beef industry, we can rapidly improve genetics and gather data. If we invest now, we can build long-term value and avoid a steep market decline.[2]

Dr. Earleywine: Beef prices are driving expansion. The native cow-calf herd will rebound; and if we don't match their quality, we'll lose market share. Calf prices are hitting $1,000-1,500 in the U.S. in 2025, numbers we've never seen before. But reputation matters.

We're responsible for the preweaning phase and the weaning transition in beef-on-dairy calves, and that phase is critical. If we get it wrong, it affects the end product. Investing now in nutrition and management isn't just smart, it's essential to keeping beef-on-dairy competitive in the long run.

How are the nutritional needs of beef-on-dairy calves different from either purebred dairy or beef animals?

Dr. Earleywine: Crossbred beef-on-dairy calves typically grow faster and are more efficient than Holsteins, and they need protein to support that muscle development. In Purina Animal Nutrition trials, higher-protein milk replacers (27% vs. 25% or less) and calf starters led to significantly better growth.[3] These crossbreds are genetically predisposed to build more muscle, so protein is critical.

Dr. Steele: Beef calves typically receive more colostrum immunoglobulins (IgG) at birth because they nurse from the cow, whereas beef-on-dairy calves often receive less, both in volume and concentration. That means we may need to rethink how much and what kind of colostrum we feed, possibly more concentrated or higher-quality products. Transportation also plays a big role. Beef-on-dairy calves are often moved early, and that stress adds nutritional demands. Some buyers now pay premiums for heavier calves, incentivizing better early-life nutrition.

How can early investments in nutrition set a beef-on-dairy program apart in the eyes of buyers or processors?

Dr. Steele: Early-life nutrition is thought to have a big impact on carcass quality, though we still need more long-term data specific to beef-on-dairy animals. In dairy, we know better early nutrition can improve health and productivity, and there's every reason to believe the same applies here. But we can't just copy what works for dairy replacements. For example, in Canada, we feed very high levels of milk, but that might not be ideal for beef-on-dairy calves, especially after transport. They may benefit more from moderate-to-high levels, paired with the right starter feed formulation but there has been very little research in the area. There's also potential to customize feeding strategies throughout early development to improve end-product quality.

Dr. Earleywine: From birth to eight months, calves are still developing the cells that determine marbling and muscle quality. Nutrition during this window, milk and concentrate feeding directly affects carcass traits. You can influence how many fat cells form (which drives marbling), how muscle cells grow and even how efficiently the animal will perform later. Getting nutrition right in those first months is key to producing a high-quality beef product, and it's something to which buyers and processors increasingly are paying attention.

In what ways does nutrition influence carcass consistency for beef-on-dairy cattle?

Dr. Earleywine: We're asking a lot of these calves by weaning them earlier than nature intended, then transporting them multiple stressful times. If we can support their gut early through proper nutrition, calves are better equipped to handle stress and maintain consistent growth. Our lab focuses heavily on this early-life programming because how you feed a calf in those first weeks can help shape its entire development trajectory.

Dr. Steele: We don't have a specific formula yet for "feed this to get this carcass," but general principles tell us proper health and growth early in life usually lead to optimal carcass outcomes. It's about finding the balance of what level of milk or nutrition gives us the best return. We need more long-term data, but it's likely that investing early pays off later. The ability to fine-tune feeding, especially with tools like automated feeders, also gives us more control to test and improve these strategies over time.

WHEN DONE RIGHT, THE PRIMESTART™ PROGRAM SUPPORTS CALVES HITTING

300 LBS. BY ABOUT 87 DAYS OF AGE.[5]

On some operations, calves may not hit that weight until after 100 days.

Beyond carcass consistency, how does nutrition support marbling, yield or grade potential in beef-on-dairy animals?

Dr. Steele: There's data supporting a long-term link between early nutrition and marbling outcomes.[4] This opens exciting possibilities: By adjusting genetics and nutrition, especially with beef-on-dairy animals, we can help produce a final beef product that more precisely meets consumer preferences. There's a lot of potential to optimize quality beyond what's traditionally possible.

What is Purina's PrimeStart™ program and how is it designed to support beef-on-dairy calves?

Dr. Earleywine: The PrimeStart™ program includes both our milk replacer and starter feed. Colostrum management is part of it, too. It's all about setting these crossbred calves up on a higher plane of nutrition from day one so they can deliver optimal performance all the way through to carcass value.

Let's start with colostrum. We strongly recommend two high-quality feedings within the first 12 hours of life. Current customers can use our Purina Caddie™ calf app to evaluate and balance colostrum quality to provide the appropriate quantity of IgG depending on its body weight. That means knowing both your colostrum quality and the volume needed. For many producers, reaching the appropriate target for each calf can be challenging with the old standard of "just provide four quarts," which is why we developed the app and also offer a colostrum replacer to help "spike" the IgG content if needed.

From there, the PrimeStart™ Calf Milk Replacer is a high-protein formula specifically designed for crossbred calves. It includes technologies like L-carnitine – which plays a role in energy metabolism and muscle development – as well as our LOL *bacillus*, which supports gut health and proper microbiome development. These help the calf become efficient early in life.

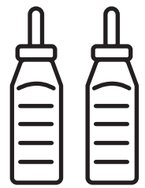
We typically recommend feeding two quarts three times a day or three quarts twice a day, and weaning no earlier than 56 days of age. That longer milk-fed phase, when paired with a high-quality starter feed, makes a real difference. PrimeStart™ Complete Starter Feed includes elevated amino acids essential for muscle growth, is appropriately balanced for energy and is highly palatable, so calves eat aggressively and can grow fast.

When done right, the program supports calves hitting 300 pounds by about 87 days of age.[5] That's meaningful. On some operations, calves may not hit that weight until after 100 days. Faster, more efficient early growth leads to a lower cost of gain. Compare that to cheaper milk replacers fed at lower volumes, where calves often burn more nutrients just maintaining themselves rather than growing. That ends up costing more in the long run.

For producers, that consistency and early weight gain can mean quicker turnaround and more calves through the system. For those retaining ownership through finish, we're seeing evidence of improved feedlot performance and even better marbling potential, tying back to what Dr. Steele mentioned about early muscle development. Better nutrition early in life helps sets the stage for better outcomes.

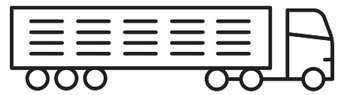
What advice would you give to producers looking to elevate their nutrition programs as a long-term investment?

Drs. Earleywine and Steele: Producers should focus on three core areas:



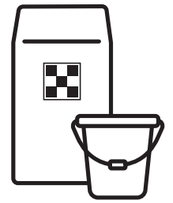
BULK UP COLOSTRUM MANAGEMENT PRACTICES.

Calves need high-quality colostrum. For example, a 90-lb. calf needs approximately 300 grams of IgG, delivered within the first 12 hours in order to meet standards for colostrum management.[6] Two timely feedings and tools to test and balance colostrum are recommended.



PROVIDE PRECONDITIONING AND TRANSPORTATION SUPPORT.

Using products like Land O Lakes® HST Water Supplement and Land O Lakes® Calf Insure® helps calves transition smoothly between operations and support early immune strength to handle stress.



SUPPORT CALVES WITH A COORDINATED MILK REPLACER AND CALF STARTER PROGRAM.

These must work together to fuel growth, support gut health and unlock the calf's beef genetic potential. Early gains can translate to optimal performance and carcass value. If a producer can get it right in those first eight to 12 weeks, the benefits show up all the way to the rail.

TOM EARLEYWINE, PH.D.

Director of Young Animal Nutrition, Land O'Lakes

Dr. Tom Earleywine is director of young animal nutrition for Land O'Lakes where his team is responsible for neonatal animal research on over 1,200 head annually and provides technical support for North America. Dr. Earleywine has published hundreds of articles in scientific journals and popular press. He received his B.S., M.S. and doctoral degrees from the University of Wisconsin-Madison and was raised on a dairy farm near Brodhead in southern Wisconsin U.S.A.

MICHAEL STEELE, PH.D.

Professor, Department of Animal Biosciences, University of Guelph

Dr. Michael Steele is a professor in the Department of Animal Biosciences, studying ruminant physiology from the molecular to whole-animal level. Raised on a progressive dairy farm in Ontario, he explores how early-life diet and microbiota interactions affect gastrointestinal health and development. His research focuses on how pre-weaning nutrition and management influence long-term metabolic and digestive outcomes in livestock, aiming to improve production systems through a better understanding of early-life physiological programming.

NEVIL SPEER | Industry Consultant

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WHY BEEF-ON-DAIRY CALVES MIGHT BE THE MOST VALUABLE THING ON YOUR DAIRY RIGHT NOW

If you're running a dairy today, odds are you're not just thinking about milk anymore. You're thinking about beef-on-dairy calves and the kind of revenue they're bringing to the operation. In some cases, they're doing more for the bottom line than the lactation side itself.

CONSIDER A 1,500-COW DAIRY EXAMPLE:

BREEDING 1,000 COWS TO BEEF

95% CALVING RATE SELLS ABOUT 950 BEEF CALVES A YEAR

That's roughly $950,000 in added revenue
or about $633 per cow across the whole herd. That alone can boost a dairy's annual margin by 20%. In tough milk markets, it might even be the difference between breaking even and turning a profit.

Feeling the market pressure

Dairy producers are accustomed to market swings, but recent years have delivered even more pressure. Milk prices remain volatile due to international trade friction and oversupply, while operational costs, especially labor and healthcare for calves, continue to rise. The key metric many producers now prioritize is income over feed costs (IOFC), and milk alone is often not enough to sustain healthy margins.

While the five-year average dairy margin hovers around $9.50/cwt, that doesn't always translate to long-term profitability. Producers are increasingly turning to additional revenue streams to supplement income.

Opening barn doors with precision breeding

Traditionally, male Holstein calves were seen as a low-value byproduct of milk production. That's no longer the case. Today, dairy producers are using advanced breeding programs to reserve top genetics for creating replacement heifers — while breeding the rest of the herd with beef semen to produce calves that bring in significantly higher returns.

Enter the beef-on-dairy calf. These calves yield more red meat, grade higher in quality and ultimately command stronger prices than purebred Holstein steers. As a result, beef-on-dairy calves aren't just an add-on, they're an entirely new revenue stream that reshapes the economics of dairy farming.

Doing the math

Right now, beef-on-dairy calves can command $1,000 or more at market. With better genetics and more consistency, today's calves are treated as a premium product, and buyers are paying accordingly.

Changing how dairies think about risk

This additional revenue stream also changes the way dairies approach risk. Historically, many relied heavily on margin protection programs like Dairy Margin Coverage (DMC). But with significant calf revenue potential in the mix, dairies can consider reducing the level of milk margin insurance they purchase — saving hundreds of thousands annually in premiums.

Take the 1,500-cow example again: Scaling back Tier 2 DMC coverage from $8/cwt to $6.50/cwt could save more than $340,000 a year, without compromising the dairy's financial safety net. The result is greater resilience in a low-margin environment.

Rethinking value in the market

Dairy producers can no longer think about their businesses with a simple focus on milk production. They are cross-sector operators who must understand both dairy and beef markets to remain competitive. That requires understanding multiple markets including feed and milk prices along with calf values. Those dairy operators who embrace the reality of that complexity will have an inherent advantage when it comes to profitability over the long run.

NEVIL SPEER
Industry Consultant

Nevil Speer works as an industry consultant based in Bowling Green, Kentucky. He has experience in both academia and private industry. His career includes working with several start-ups along with various service and consultation projects spanning a wide variety of topics. In addition, he currently serves as a regular contributor for Feedstuffs and BEEF Magazine. Dr. Speer holds a PhD in animal sciences from Colorado State University and an MBA from Western Kentucky University.

DANIEL THOMSON, PH.D., DVM | Feedlot Veterinarian
Partner in Production Animal Consultation, LLC

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ONE PHASE AT A TIME: HEALTHY CALVES MEAN PROFITABLE FEEDLOTS

Feedlot performance doesn't start when the calves hit the bunk. It starts at birth, and every step along the way either protects or undermines the animal's potential. Whether you're raising beef-on-dairy or conventional beef cattle, the health and resilience of calves are built long before they step off the truck at a feedlot.

Today's tight margins demand intention at every phase of production.

PHASE ONE:
Getting calves off to a strong start

Strong calves don't happen by accident. Their health trajectory begins with the basics of clean environments, good nutrition and passive immunity. Calves raised in environments that prioritize good hygiene, disease prevention and consistent nutrition show up stronger and more resilient.

These practices are critical for beef-on-dairy calves. Once viewed as by-products, these animals are now recognized as feeder cattle with real genetic potential and economic return. But they must be treated accordingly. Proper calf care sets the stage for everything that follows.

More calf raisers and dairies are rising to the challenge – recognizing their calf management practices impact more than their bottom lines; they affect the entire beef supply chain. And for the feedlot, those early gains mean a higher chance of success from day one.

PHASE TWO:
Setting the tone at feedlot arrival

Transportation stress is inevitable, but how we manage the transition can make all the difference.

At arrival, minimizing stress is priority one. Follow a simple principle: For every hour calves spend on the truck, they get one hour of rest before processing. That downtime helps reset their immune systems and energy levels.

When it's time to process, protocols should include a comprehensive health plan of vaccinations, deworming and other preventatives aligned with veterinary guidance. But facilities and people matter just as much as products. Calm handling through alleys and chutes helps reduce stress and sets the tone for the calf's entire time on feed.

After processing, calves move to their new pens, where fresh water, clean feed and dry bedding support continued recovery and help calves find a rhythm in their new environment.

PHASE THREE:
Proactive health, not just reactive

Once calves are on feed, begin proactive health management with observation. Spotting early signs of respiratory disease – like droopy ears, nasal discharge and coughing – can often signal the onset of a more serious problem.

This approach is especially essential for beef-on-dairy calves, who are often more vulnerable to conditions like mycoplasma infections and other respiratory challenges. Establishing clear criteria for intervention, maintaining meticulous health records and adhering to standard treatment protocols means that every calf is given an equal chance to recover quickly. Early detection not only prevents disease escalation and spread to other calves but also minimizes disruptions in growth and feed efficiency.

PHASE FOUR:
Managing the gut, not just the lungs and liver

Respiratory conditions and liver abscesses are major concerns, but don't over look digestive health. Calves – especially those from beef-on-dairy backgrounds – can be particularly susceptible to nutritional stress and digestive disorders such as acidosis, bloat and scours. This sensitivity can be attributed to their smaller size at arrival and transition to bunk-fed grain diets.

Successful management in this phase involves ensuring ample bunk space, gradual ration changes and the inclusion of roughage to ease digestion. Even the most well-formulated ration can fall short if the animal is not physiologically prepared to digest it effectively. By meticulously managing digestive health, feedlot operators can secure more consistent average daily gains and overall better feed conversion rates.

PHASE FIVE:
Connecting calves to their health histories

A comprehensive understanding of each calf's early life and care history is a powerful tool in the feedlot. When dairies and calf raisers share detailed health records – covering colostrum intake, previous vaccinations and any treatments administered – feedlot managers can more accurately tailor their health protocols.

Disease happens for two reasons: exposure and suppressed immunity. Calves that weren't raised right will struggle no matter how well we manage the feedlot. With detailed background information, feedlots can proactively manage risks related to exposure and immune suppression, resulting in better performance and fewer setbacks at the rail.

The bigger picture: A system, not a silo

The good news? We're starting to see raisers and feeders work more closely together. Calf raisers and dairies are investing in better calf management practices because they know the end value is worth it. And feeders are adapting to manage the requirements of beef-on-dairy cattle more effectively.

The result? Lower treatment rates, higher feed efficiency and better carcass quality. That's the power of systems thinking. No single tool or product can create success. But every small improvement – from birth to bunk to beef – adds up to healthier cattle, stronger profits and a durable supply chain.

DANIEL THOMSON, PH.D., DVM
Feedlot Veterinarian; Partner in Production Animal Consultation, LLC

Dr. Dan Thomson is a third-generation veterinarian and managing partner at Production Animal Consultation, serving feedlot clients across the Midwest. He advises major beef supply chains, including McDonald's, Tyson, Cargill and JBS, and chairs the NCBA Animal Welfare Committee. With over 100 peer-reviewed publications and $36.3 million in grants, he's a global speaker on cattle health. He also hosts Doc Talk on RFD-TV, a nationally aired show on bovine medicine now in its 15th season.

TY LAWRENCE | Professor of Animal Science; Director, Beef Carcass Research Center
Department of Agricultural Sciences at West Texas A&M University

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GIVING PACKERS WHAT THEY WANT: A HASSLE-FREE PROCESS

Packers want cattle that present minimal challenges throughout the entire harvest process, starting from when they exit the truck to when they are processed into high-quality beef products. Step one: packers want an ambulatory animal. This means the animal should be able to walk off the truck and enter the pen system without issue.

Once the animal is in the holding pen, packers prefer it remains calm and able to rest without complications. When it's time for the animal to move to the restrainer for stunning and exsanguination, packers need it to be hassle-free. Every issue – whether it's related to soundness, behavior or health – adds unnecessary labor and reduces the overall efficiency of the plant

From a husbandry standpoint, packers prefer animals that are clean and free of contaminants, like mud or manure on the hide. Cleanliness is not related to the animal's type but rather how well it's managed and handled in the feedlot. In fact, dirty animals can result in costly trimming and a lower yield of usable product. Any issues that force workers to trim parts of the carcass not only add labor costs, but they also lead to losses in the amount of salable meat.

Color and carcass size: Do they matter?

While dominant black-hided animals may qualify for premium programs, color alone doesn't define quality. Rather, packers want beef-on-dairy animals that can match marbling scores similar to high-quality native-sourced steers and heifers.

And size? That's becoming an increasing challenge. Some beef-on-dairy crosses are now as large (or larger) than purebred Holsteins, reaching 1900 pounds or more. While packers are adjusting infrastructure to accommodate bigger animals, oversized carcasses slow line speeds and increase labor.

The biggest challenge with beef-on-dairy animals

Animals free of disease, specifically, those without lung health issues, liver abscesses or bruises are sought after by packers. Disease or injury on the carcass can lead to reductions in marketable products, especially when parts like the liver, tongue, heart or other organs become unfit for sale.

Liver abscesses contribute to an estimated $900 million in annual losses.[7] These losses are primarily driven by the decreased value of the affected organs and the increased costs associated with handling and disposing of these compromised animals. This figure doesn't account for additional financial impacts such as the downtime for the loss of productivity due to health-related delays or the downgrade of meat products.

With the right management at the calf ranch, liver abscess challenges can be reduced. While often viewed as a finishing-phase issue, liver abscesses are influenced by the calf's earliest experiences, particularly nutrition and health during the first few months of life. Calves that experience stress, inconsistent feeding or poor gut development are more likely to face digestive challenges later on, increasing the risk for abscesses when they reach high-concentrate diets in the feedlot.

Beyond feeding, overall calf comfort and cleanliness matter. Ensuring clean pens, providing adequate bedding and limiting overcrowded housing can all contribute to stress and immune suppression. When calf ranches get the basics right – feeding, housing and health – the benefits echo down the line. This may result in fewer liver abscesses, more streamlined harvest process, better feedlot efficiency and stronger overall returns on these cattle.

Ensuring packer preferences are met

Communication between beef processors and cattle producers is critical to ensuring that packers' preferences are consistently met. Producers need to engage with packers regularly to understand what is working and what is not, making adjustments to management practices as needed. Too often, feedback only comes when a problem arises, which means there may be tens of thousands of cattle that don't meet the ideal specifications before the issue is communicated.

Producers are encouraged to regularly evaluate the quality of their cattle and actively engage with processors to understand how animals are performing at harvest. Ongoing communication helps both sides make informed decisions to improve cattle management, animal health and carcass consistency. These efforts contribute to a stable, profitable supply of beef-on-dairy cattle that benefits dairies, feedyards and packers alike – reinforcing the value of collaboration across the supply chain.

TY LAWRENCE, Ph.D | Professor of Animal Science | Director, Beef Carcass Research Center, Department of Agricultural Sciences at West Texas A&M University

Dr. Ty E. Lawrence is a professor of animal science at West Texas A&M University and director of the Beef Carcass Research Center, which evaluates more than 200,000 cattle annually. Raised on a cow-calf operation near Dalhart, Texas, he earned degrees from WTAMU and Kansas State. He's taught nearly 4,000 students, advised dozens of graduate theses and published 135+ peer-reviewed papers. His research focuses on improving red meat yield, quality and safety. He holds the Caviness Davis Distinguished Chair in meat science.

BRUCE COBB | Executive Vice President of Production, Certified Angus Beef

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QUALITY COUNTS: CERTIFIED ANGUS BEEF® MEETS CONSUMER DEMAND THROUGH EXPANDED SUPPLY CHAIN

The mission of Certified Angus Beef has stayed the same: To create demand for registered Angus cattle by delivering consistent, high-quality beef to consumers. That's been the purpose from day one, which still drives the brand today. Certified Angus Beef is here to build a brand that resonates with consumers and works its way back through the supply chain to benefit cattle producers. And how does the brand do this? By upholding standards that guarantee quality and consistency.

What it takes to make the Certified Angus Beef cut

To qualify for the *Certified Angus Beef*® brand label, cattle must first meet the live animal specification: an Angus-influenced appearance, typically defined by a predominantly black hide, without white showing above the flank and behind the shoulder. But that's just the entry point.

Not all Angus are created equally, and what truly sets the brand apart is its set of ten carcass specifications. Among the most critical is marbling. A modest or higher marbling score is one of the specifications, helping to ensure the flavor and tenderness that consumers come back for, time and time again. Other specifications on the list include a ribeye area (REA) of 10 to 17 square inches, fat thickness no more than 1 inch, hot carcass weight (HCW) no greater than 1,100 pounds, medium or fine marbling texture and more. These standards help ensure size and quality consistency from coast to coast and worldwide.

Consistency matters. As with any trusted brand, whether it's jeans or chocolate chip cookies, consumers expect the same experience every time they engage. Certified Angus Beef is no different.

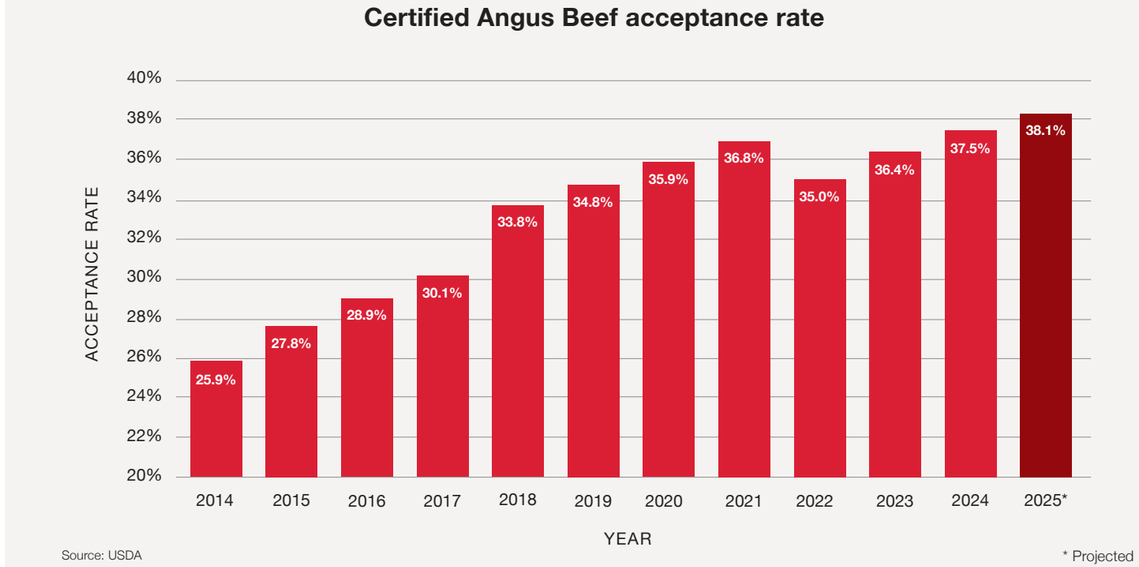
How beef-on-dairy cattle contribute to premium beef

Fed dairy cattle have long been a part of the beef supply chain. Research shows there is no product difference in the beef produced by beef cattle versus beef-on-dairy calves that meet the *Certified Angus Beef*® brand specifications.

To maximize profitability, dairy producers have begun selecting high-quality Angus genetics for performance traits like marbling and carcass yield. With intentional genetic decisions and the right management, beef-on-dairy cattle have the capability to meet Certified Angus Beef® brand standards.

As a result, Certified Angus Beef's acceptance rates among beef-on-dairy cattle are improving, and opportunity for continued growth exists with each calf crop.

With only 38% of eligible fed cattle making the cut, there's still work to do. There's a huge opportunity in that other 62%. If the beef industry can tighten up how those cattle are managed through genetics, nutrition and animal health, more animals will shift into qualifying territory.



Driving the supply chain forward

In 2025, Certified Angus Beef accounts for about 24% of the U.S. fed cattle market, which is a notable increase from 20% five years ago.[8] As consumer preference for high-quality beef continues to grow, the brand is working to continually grow its supply – while boosting demand for Angus genetics and improving how fed cattle, including beef-on-dairy, are managed. That unlocks more value and raises profitability for producers.

An estimated 10% of cattle barely miss *Certified Angus Beef*® brand qualification, falling short on marbling and failing to meet the marbling specification. With better genetic decisions, improved animal health management and stronger nutrition strategies, a significant portion of this group could meet brand standards. That shift would offer economic benefits for producers and increase supply without compromising quality.

Positive to the overall Certified Angus Beef supply, the beef-on-dairy sector is achieving greater consistency in both quality and volume. The structure of the dairy industry allows for a predictable, year-round supply to meet the needs of retailers and restaurants looking to offer premium beef every month.

Certified Angus Beef encourages producers to participate in programs like Beef Quality Assurance (BQA) and Calf Care and Quality Assurance (CCQA) to focus on long-term genetic and management strategies. The reward is more cattle hitting premium specifications and a stronger brand that benefits the entire supply chain.

BRUCE COBB

Executive Vice President of Production, Certified Angus Beef

As executive vice president of production, Bruce brings the mindset of a retailer, international trader, producer and consumer to the table. He leads the production group which involves product services, sustainability programs and supply development efforts while focusing on expanding and enhancing the brand's supply chain. He grew up on a West Texas farm and brings diverse experience to his role, ranging from the Texas Beef Council, U.S. Meat Export Federation to Daymon Worldwide and Consolidated Beef Producers. Bruce embraces the challenge of strengthening the brand's supply chain by connecting all segments of the beef industry.

The beef-on-dairy sector offers a range of benefits to the beef supply chain, including:

- Higher red meat yield and more valuable carcasses compared to traditional dairy steers
- A consistent, year-round beef supply to help offset shortages in the beef cattle market
- Eligibility for *Certified Angus Beef*® certification
- Enhanced traceability from farm to fork

YOUR LINK TO BEEF-ON-DAIRY STRATEGIES

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