



EARLY LAMENESS DETECTION

STRONGER HOOF CARE PROGRAMS

Discover how progressive dairies improve animal care, reduce lameness and redefine dairy success with the help of lameness detection technology and trusted advisors.



HoofStrong[®]



Specialty
Herd Solutions

Why the Future of Dairy Production Hinges on Early Lameness Detection

Progressive dairies are reaping big benefits from early adoption of proven lameness detection technology. The performance numbers are sharpening the competitiveness of these herds and shaping the future standards of animal care. In fact, early intervention shortens lameness cases by an average of 40 days. This translates into an average savings of \$45 per cow per year.

Studies have shown that human-only assessments are prone to disagreements, and workers often disregard mild cases of lameness.* AI-driven insights can help address the shortage of workers skilled at cow care observations, making lameness detection technology more consistent and reliable. It also shows faster action and targeted treatment, ensuring:

- **Reduced number of serious cases**
- **More efficient and cost-effective treatment**
- **Protected milk production and reproductive success**
- **Stronger herd health and improved animal welfare**

The Consequences of Waiting Until a Cow Looks Lam

For decades, dairy producers have relied on visual observation and scheduled hoof-trimming protocols to identify cows needing attention. While these practices remain valuable, they share one significant limitation: they often identify problems only after a cow is already experiencing substantial discomfort and performance loss.

By the time lameness becomes obvious, the biological and economic consequences are already underway. Milk production may have declined, reproductive performance may be compromised, and the likelihood of recovery becomes increasingly difficult.

*[https://www.journalofdairyscience.org/article/S0022-0302\(25\)00215-2/fulltext](https://www.journalofdairyscience.org/article/S0022-0302(25)00215-2/fulltext)

Current Lameness Statistics



22% of U.S. dairy cows are estimated to be walking with a noticeable limp at any given time.¹



Milk loss: Clinical lameness has been associated with nearly **800 pounds** of lost milk production per lactation.³



Average cost per case: ~\$337, with published estimates ranging from \$76 to \$533 depending on severity and associated impacts.²



How do we move from reacting to lameness to preventing it?

The answer increasingly lies in continuous monitoring technologies that detect mobility changes long before they are visible to the human eye.

“The old way was the cow movers bringing lame cows to us on a list and it was sporadic, very inconsistent and now we have this daily report and it’s been very reliable.”

—Johannes Wakker
Founder, Wakker Dairy Farm, Wisconsin
3,600 cows expanding to 4,600



¹ Cook, N.B. (University of Wisconsin). Reported in Dairy Herd, “Count the Costs of Lameness in the Cowherd,” March 2025

² Robcis et al., 2023, Journal of Dairy Science; Dolecheck & Bewley, 2018. [extension.psu.edu]

³ Warnick et al., 2001; Green et al., 2002; summarized by Penn State Extension.

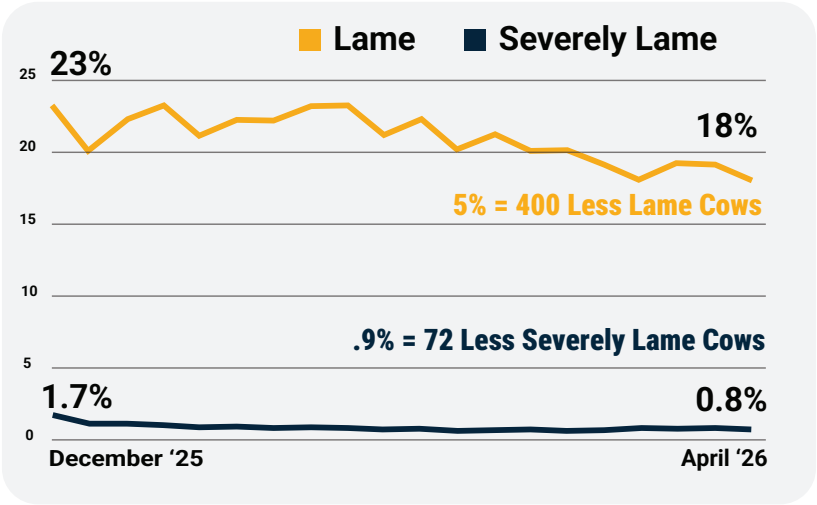
Early Intervention Changes Everything

Early lameness detection technology is creating a continuous stream of reliable locomotion data every time a cow passes a monitoring point. Rather than evaluating cows occasionally, farms gain the ability to assess locomotion multiple times each day.

The result is a fundamental shift: Instead of finding lame cows, farms can identify cows trending toward lameness and intervene earlier.

This transition from periodic observation to continuous monitoring helps producers focus on the animals most in need of timely attention and make proactive adjustments to foot bath protocols with real-time data insights.

8,000 Cow Dairy, Pacific Northwest U.S. Ensure Early Wins with Attention

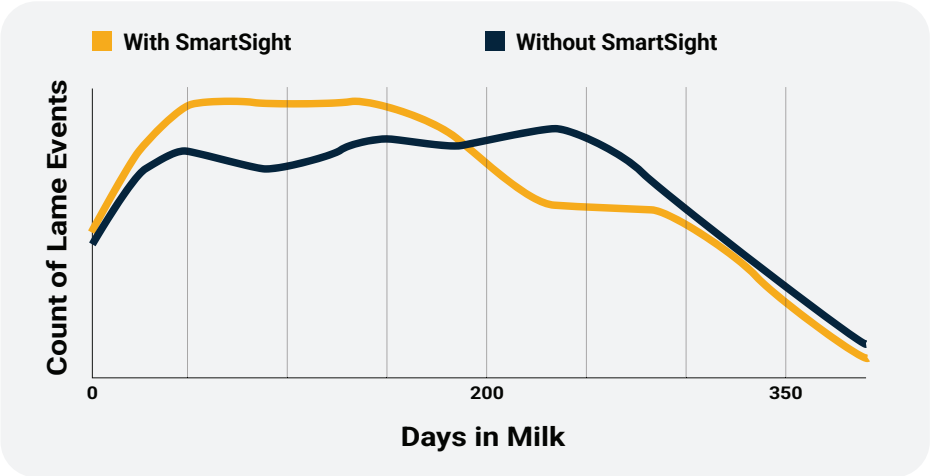


Why Timing Matters More Than Ever

Real-world farm data consistently demonstrates the earliest stages of lameness represent the greatest opportunity for intervention.

A Vermont dairy's analysis showed the first 180 days in milk represent a critical period for the onset of lame events. Yet this high-risk period is often underserved when farms rely solely on scheduled trimming or visual observation.

Milk Cows Want Early Intervention Lame Events Throughout Lactation



The Implications are Significant:

- Earlier detection allows cows to receive attention before severe lesions develop.
- Recovery rates improve when issues are addressed sooner.
- Fewer cows progress into chronic lameness.
- Farms can reduce the burden on hospital and lame-cow pens.



“Lameness hasn’t been a big problem on our dairy, but it’s one that we haven’t really improved on over the years. Our old routine was inefficient, you had to pretty much spend the whole day walking pens. The most valuable thing I’ve seen on the SmartSight locomotion monitoring is you’re checking every cow three times a day. Every time they walk past the reader, you have **a score that you can trust**. If you’re trying to improve lameness, this is one of the best ways.”

—Eric Grotegut
Grotegut Dairy, Wisconsin
4,000 cows

“Our goal is to have old cows that have been around for a long time. We’ve noticed that finding lame animals earlier in lactations has been amazingly beneficial to reach that goal. A lame cow to me used to be an animal with a problem that I could see. Now we have cameras picking up issues that only SHE can feel. It enhanced our eyes.”

—Tyler Ribeiro
Owner, Rib-Arrow Dairy, California
1,500 cows

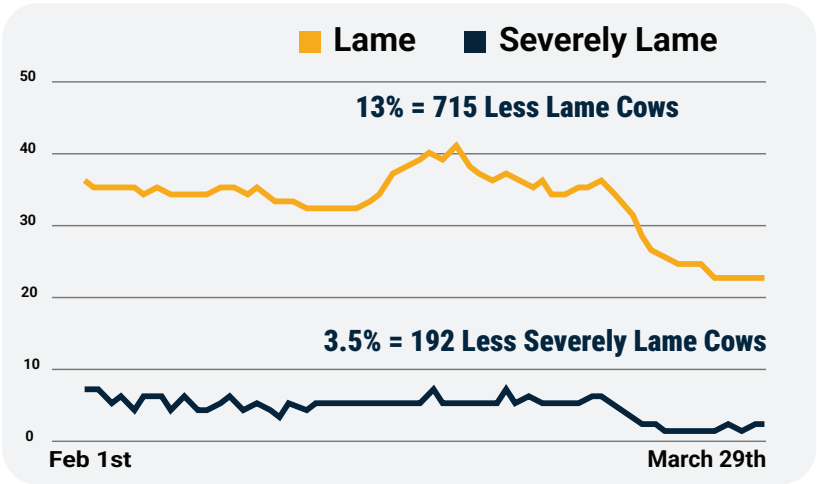


The Business Case for Locomotion Monitoring

Across multiple dairies, producers reported measurable improvements in herd performance after implementing continuous, objective and consistent locomotion monitoring with SmartSight.

An Arizona dairy reduced involuntary lameness culls from 13 a month to just one, within four months.

5,500 Cow Dairy, Arizona Phase 1 & 2 Complete



—Skylar Gericke
Manger Triple G Dairy, Partner Legen-Dairy, Arizona
5,000+ cows

“We’re trusting our whole lameness program on Nedap SmartSight. We used to get 13 or 14 cows sold due to lameness. Since adopting the system, those numbers have fallen dramatically. During the time I’ve had it, it’s been one cow a month. This is a big deal for me because it allows me to make less heifers, breed more beef and be more profitable in the end.”

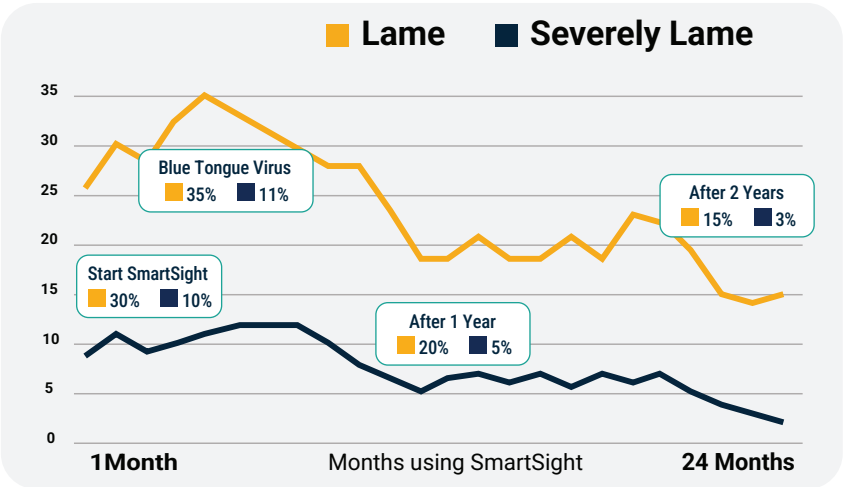


Scan to watch their stories

Early Detection by SmartSight is Real.

The first dairy to implement SmartSight in the Netherlands reported an increase in lifetime milk production of 15,340 pounds after just two years. They saw a 50% reduction in overall lameness and a 65% reduction in severe lameness.

The Data is Clear: First SmartSight farm after 2 years



Reaping the Benefits:

SmartSight Year 1: Clean up backlog of chronic lame cows
SmartSight Year 2: Watch your herd KPI's shift

	Overall Cull Rate	Culling Reason Feet & Legs	Lame Cases	Lifetime Milk Yield at Culling	Average Age at Culling
1 Year Before	21%	8%	400	121,227 lbs	6.09 years
1 Year After	21%	9%	566	129,848 lbs	6.10 years
2nd Year After	14%	5%	328	136,567 lbs	7.00 years
	↓7% Overall Cull Rate	↓4% Lame Culls	↓230 Lame Cases	↑15,340 lbs Lifetime Milk	↑3 Months Age @ Culling

Longevity: The New Metric of Success

Historically, many producers accepted lameness as an unavoidable aspect of dairy production. However, today’s leading operations are challenging that assumption.



Lameness management is not simply a hoof-health issue. It is profitability, longevity, labor-efficiency, and sustainability imperative.

Two-year results from the first SmartSight installation demonstrated reductions in overall cull rate, fewer lameness-related culls, increased lifetime milk production, and longer productive life within the herd.

These outcomes point toward a broader industry trend: **The future of dairy profitability is increasingly tied to helping cows stay healthy, productive, and in the herd longer.**

When mobility improves, producers often see positive ripple effects throughout the operation—from reduced replacement pressure and lower treatment costs to greater lifetime performance.



The Future of Lameness Management Is Proactive, Not Reactive



As labor becomes more challenging to source and herd sizes continue to grow, the ability to evaluate every cow consistently becomes increasingly difficult through observation alone.

The next generation of herd management will rely on technologies like SmartSight that help producers identify risks earlier, prioritize attention more effectively, and act with greater confidence.

Continuous mobility monitoring isn't replacing stockmanship - it's enhancing it. The goal is no longer simply finding lame cows. It's preventing severe lameness from ever occurring in the herd.



HoofStrong

Only HoofStrong combines SmartSight mobility insights with direct management of your footbath program, turning early detection into targeted action and measurable results.



If you're trying to improve lameness, this is one of the best ways. If you're doing foot baths and hoof trimming correctly, it's the next step to improving hoof health and lameness."

-Eric Grotegut
Grotegut Dairy, Wisconsin
4,000 cows



Start Improving Your Protocols Today

Request a free hoof care audit and learn how combining SmartSight with HoofStrong can benefit your dairy operation.

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