

"The ability to make management decisions earlier has completely changed how we manage the herd throughout the season."

Tru-Test
DATAMARS

Caulston Farm: how precision monitoring improved fertility, efficiency, and herd performance

Caulston Farm, nestled in the UK's South Devon coastal region, is a **pasture-based organic dairy farm home to 600 KiwiCross cows**, all calving within a condensed 9-week spring block. **Its coastal location presents challenges**, particularly due to thin, sandy soils that struggle to retain moisture, **making the farm prone to drought**.

The farm layout is linear, with a centrally positioned milking parlour requiring cows to walk up to 3 km in either direction. **While pasture is the primary feed source, supplemental feed is provided during periods of increased demand.**

Given the challenging environmental conditions and tight calving schedule, **maintaining optimal cow condition is crucial for a successful breeding season.**

Sandy soils are less fertile and retain less moisture, making the farm prone to droughts and challenging for meeting cows' energy needs.

Teagasc (2024) states that "missing a single heat costs £44 for the slip in calving date and £81 for the increased likelihood of cows not in calf in a 12 week breeding season".

Given these stakes, **achieving a high level of heat detection is crucial for success.**

AT A GLANCE

 **Farm:** Caulston Farm

 **Location:** South Devon, UK.

 **Herd size:** 600 milking cows

 **Seasonal:** Spring block calving

CHALLENGES

- Maintaining optimal cow condition
- Managing supplement costs efficiently
- Accurately detecting cows in heat

DATAMARS LIVESTOCK SYSTEMS

Tru-Test Dairy WoW 4000

Tru-Test Active Tag Collars

BENEFITS

- Improved herd health and fertility
- Reduce straw usage for insemination
- Heat observation time cut from 3 hours to 10 - 15 minutes
- 86% of cows in calf in first 6 weeks, condensing calving pattern and increasing days in milk
- £30,000 Feed savings by targeted feed to "thin cows" by using weight data
- Improved Cow Condition - Healthier cows experience fewer health issues
- Advanced animal management

Identifying heats is just part of the challenge - getting cows back in calf is another. From calving to regaining optimal rumination and body condition, every day counts. Cows in poor condition struggle to conceive, yet daily monitoring of each individual animal is impractical.

Body condition scoring, often performed just once before mating, leaving little opportunity for timely intervention to improve reproductive outcomes. **Precision monitoring solutions are essential to bridging this gap, enabling timely and effective management decisions that enhance reproductive performance.**

For Adam Atkinson of Caulston Farms, **the solution was clear; utilize modern technology to tackle these challenges head-on.**

By implementing the powerful combination of Tru-Test Autonomous Weighing (Dairy WoW 4000) and Tru-Test Active Tag, the Caulston Farms team has gained the tools to improve performance and navigate industry challenges more effectively.

Adam uses the WoW data to identify cows with negative ADG, then moving them to a 'thin cow' group where they receive ad-lib silage and shorter walking distances.

This targeted feeding improves cow condition without increasing rations for the entire herd, ensuring cost savings and better breeding outcomes. Cows that recover with positive ADG are then returned to the main herd.

This integration has equipped Adam and his team with **precise, data-driven insights**, enabling improved herd health management, enhanced reproductive success, and improved overall productivity.

Adam **has reduced a daily 3-hour heat detection task to just 10 minutes with Tru-Test Active Tag.** With guesswork gone-precise heat detection and insemination timing have freed up a labour unit, allowing more time away from the dairy parlour, to focus on other areas of the farm like animal nutrition.

Health detection with Tru-Test Active Tag has delivered significant benefits for Adam. **Early alerts enable prompt intervention, reducing antibiotic use and improving overall herd health.** The behavioural insights and health index further enhance decision-making by tracking treatment effectiveness and recovery progress in real time.



Adam is already seeing **the benefits of Tru-Test Active Tag and Autonomous Weighing, including improved reproduction rates and significant savings on supplement feed.**

With precise heat detection and optimized insemination timing, Caulston reduced AI straw usage while maintaining pregnancy rates, resulting in a 8% increase in conception.

The 6-week in-calf rate improved from an already impressive 82% to 86%.

Previously, achieving optimal average daily gain (ADG) required increasing supplemental feed for the entire herd. **Now, by utilizing WoW data, Adam can identify and draft individual cows with suboptimal body condition, providing additional supplementation only to those in need.**

This targeted feeding approach has reduced supplement usage by 100 kg per cow, resulting in **total savings of 60,000 kg (60 tons) across 600 cows.** Despite this reduction in overall feed usage, **reproductive performance has improved, demonstrating the effectiveness of precision nutrition.** These efficiency gains have allowed the WoW system to achieve a rapid return on investment.



Watch the video:

[youtube.com/watch?v=wMI93c55_6w&t=138s](https://www.youtube.com/watch?v=wMI93c55_6w&t=138s)



For more information:

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