

Consistency is key to productivity and profitability

Hi-tech dairy herd's success

Winning an award was 'the icing on the cake' for one Kent-based 'hi-tech' large herd. Close attention to detail is key to its success, which is facilitated by a team of dedicated staff and harnessing the latest on-farm technology.

text Rachael Porter



Ledger Farms

Carl Charnley and his team work exceptionally hard to 'consistently' manage the 460-cow herd at this Kent-based unit. And technology lends a helping hand



Herd size:	460 cows
Average milk yield:	9,000 litres
Somatic cell count:	109,000 cells/ml
Unit size:	330ha

Carl Charnley knows that some of his staff will roll their eyes or give a wry smile when he says it – they hear it on a daily, if not hourly, basis at the 460-cow unit. But the 'consistency' mantra that this dairy farm manager repeats is what he says is key to the success of this award-winning herd and business.

"It's at the heart of everything we do, on a day-to-day basis, from feeding and milking through to dry cow management and calving. And it's what helps to ensure that we not only maximise milk production, but also cow health, welfare, productivity and business profitability."

"We work hard to run a progressive, professional and profitable business and we use a lot of technology to help us achieve that," says Carl. "Automating aspects of day-to-day husbandry and management is vital to cow health, welfare, fertility and efficiency in this size of herd."

The dairy herd is run on a 1,400-hectare farm, close to Deal, and was winner of the hi-tech farm category in the 2013 Cream Awards. The enterprise uses 330 hectares and the rest are down to arable.

Pleasure palace: it now takes just two hours to milk 400 cows



Flush and dip: system saves on labour costs

The pedigree Ripple herd has gradually expanded from 180-head in 2007 to today's 460 and milk is sold on a liquid contract to Dairy Crest.

Hi-tech investment

Recent investments in machinery and technology include a Westfalia 50-point rotary parlour and a 40,000-litre milk silo. "It takes just two hours to milk nearly 400 cows and it's now a pleasure to milk them, rather than five hours of misery in the old 22:22 herringbone parlour," says Carl. "And the silo means that milk is collected every other day. We get a hefty milk price bonus for this," he adds.

All milking cows wear 'activity' collars, to aid heat detection, and the unit also has a purpose-built handling system, to make life easier and less stressful for staff and the herd.

"I designed that myself and it cost around £30,000, but it's worth every penny. It has four holding pens and is invaluable when managing such a large herd. We'd be chasing cows around all morning for AI, foot trimming and drying off without it. That's stressful and 'inconsistent' – both for the cows and the staff."

The unit also has bull pens and three sick-cow pens, also allowing any that are unable to walk far to be milked.

A slurry separator works well with the slatted collecting yard, which cost more than £100,000 in concrete alone, and this results in less diesel usage as the slurry falls easily through the slats. There has also been a recent silage clamp expansion.

Carl stresses that research is vital before investing in any technology or facilities.



Automated foot baths: key to keeping feet in tip-top condition

"We spend months – sometimes years – looking into something and making sure that it's going to improve herd management and take the business forward."

The most recent investment in technology was in an automatic cluster flushing and teat dipping system for the rotary parlour. The Apollo was installed in December 2013 and cost the business a whopping £70,000, which includes a five-year service package. "We spent a long time researching this and waited two years for it to become available. Now it's here it's saving us £25,000 a year in labour costs alone, so we'll soon see a return on our investment."

Somatic cell count is a respectable 109,000 cells/ml – not bad at all considering herd is loose housed all year round on straw. But mastitis is a problem and it's one that Carl is keen to tackle. "I think cow housing is the issue here. So our next investment will be a new straw or sawdust bedded cubicle house with a slatted floor,"

Detailed data

Fertility is also good for the herd, which is currently averaging more than 9,000 litres. Days to first service stands at 60 and the 100-day in-calf rate is more than 80%. NMR's InterHerd plays a key role here.

Carl says that he likes the detailed management data that it provides and the easy-to-use reports that flag up cows that need attention.

His biggest focus is health. "As well as avoiding pushing for very high yields that can lead to production diseases, such as LDAs, lameness, metritis and mastitis," he says.

The unit also has automated footbaths and a regular foot trimming programme ensures that the cows' feet get the attention that they deserve.

"We have five full-time staff and three part timers and we all use our eyes to spot problems and manage the cows. But the tools and technology that we have here at the unit act as 'back up'. When you're managing a large herd, a cow could get overlooked. But the systems we have in place ensure that that will never happen and she'll always be brought to our attention," says Carl, who insists that he still knows every individual cow at the unit.

More time

"The technology and systems also free up time to focus on management tasks. The rotary parlour and automatic cluster flushing and dipping system are prime examples of that. So the cow, rather than milking itself, is the focus for the staff in the parlour."

The hi-tech approach and unit facilities mean that cow numbers could be pushed up to around 500 in the near future and possibly, at some point, up to around 600 head. "We're calving around 50 cows and heifers each month, so we should be able to increase herd size gradually with our own replacements," he adds.

"Growing organically, rather than buying in stock, not only allows us to be a closed herd and enjoy the disease-free status that can bring. But it also means that staff – and technology – can adapt more naturally to a larger herd size than suddenly buying in a group of cows. We can then maintain the consistency that's key to our success." |