



Close inspection: Alltech's Stephen Ball assesses the herd's ration

# Focus on marginal gains drives sustainable profitability

Teamwork – and using data to pay close attention to detail – are key to the continued success of one Lancashire-based dairy business. We spoke to those making it happen to find out more.

TEXT REBECCA KIRK

**R**educing feed waste, optimising input utilisation, and improving cow performance are three areas where the team managing Norbreck Farm, at Cockerham in Lancashire, are focusing their attention. Owner Philip Halhead attributes the pedigree herd's impressive and continued progress to good teamwork and collaborative decision making. "We're not a new flashy farm – our farm buildings were erected in the 1960s. Having now resolved the bigger issues on our unit, including dry-cow management, cow comfort, and putting working protocols in place, we are now looking at the detail and, more specifically, the opportunities for marginal gains," he says. The herd, which is managed on a TMR-based all-year-round calving system, is currently averaging 10,700 litres, at 4.1% butterfat and 3.19% protein. When milk prices dropped to 18ppl in 2016, Philip looked for a consultant specialising in lean management: "And we are still looking at every

kilogramme and every penny of opportunity. Our view is that every cubicle space is a profit centre." Data drives everything at the unit, and the dairy business recently fitted the InTouch feed management technology to its Keenan diet feeder. "We now have a mechanism to ensure greater accuracy when loading and mixing the ration and at feed-out, as well as the all-important machine service back-up," explains Philip. "Our next step was to look at the opportunities within the wider feeding system, and it was our feeding specialist, Stephen Ball, who suggested we look into Alltech Navigate." This is a free advice service designed to help producers achieve higher profit margins by reducing feed waste and optimising farm input utilisation. The service is founded on the principle of assessing, analysing and 'actioning' data – an invaluable resource to producers and the wider food chain.

### Fresh insight

"We arranged a visit, and we left the consultant to it. They looked around the farm, particularly focussing on the silage clamps and the cow housing, and produced a report that gave us fresh insight into what we were doing right or wrong." Philip says they looked at the key performance indicators within the report as a team before deciding which action points were a priority (see Table 1). "We were particularly looking for easy wins."

Sally Nicholson:  
**"We thought there may be an invisible mycotoxin"**



Philip Halhead

Farm manager: **Philip Halhead**  
 Herd size: **300 milkers, plus 160 followers**  
 Average yield: **10,700 litres, at 4.1% butterfat and 3.19% protein**  
 Unit size: **105 hectares**



Cockerham, Lancashire

Assistant herd manager Sally Nicholson and ET/IVF lead Charlotte Walling brought practical action to many of the strategies. The unit's silage clamps were well compacted – among the best the consultant had seen. "When filling clamps, we use a compacting tyre, and sprinkle salt to help preserve the top layer before sheeting down to help reduce waste," says Sally. The report also suggested how to further reduce nutrient losses, or mould development, in the clamps. These included adding more tyres and ensiling in a dome-shape to help with consolidation, and preserving the clamp sides. Other recommendations included mowing grass at 9:30am, to maximise the optimal wilting conditions, and to ted grass within 30 minutes of mowing because wilting is five times faster in the first two hours. The report also identified a possible penicillium mycotoxin risk. This particular strain of mycotoxin tends to increase rapidly in stored feedstuffs or forages, and is known to decrease beneficial microbial populations in the rumen, reducing the synthesis of volatile fatty acids and changing microbial protein production. Such effects may result in digestive disorders, decreased milk production or milk quality, and compromised reproductive performance.

### Mycotoxin binder

"We rarely see cystic ovaries, but saw several cases over a period of a few weeks in February this year" says Sally Nicholson. "Our cows transition smoothly. They deliver healthy calves, cleanse well and we rarely see milk fever. With every additional 'open' day costing £5 per cow, we had to address the cyst problem quickly. We couldn't see mould in the silage, but thought there may be an invisible mycotoxin. Alltech pointed out the clinical signs of mycotoxins, and we thought 'bingo'. We added Mycosorb A+ to the diet in March and, within a few weeks, there were no more fertility issues due to cysts," she says. Second to feed are the unit's calf-rearing costs, so these also required close attention. "We are targeting heifer

daily liveweight gains of 0.95kg, to achieve calving at 23 months. It's all about good health during those early weeks, which is why we invested in a new rearing unit. Our calf building design offers plenty of space and ventilation. Calves are also grouped and 'weighed in' and 'weighed out' to monitor growth. We've reduced antibiotic use and are driving down cases of pneumonia and scours – all factors impacting the cow later in life," adds Sally. The report also highlighted that each cow in the milking herd only had access to 5.4cm of water-trough space – that's 4.6cm below the 10cm target. And some troughs were cleaner than others, despite a weekly cleaning schedule. "We had noticed queuing and 'bullying' after milking when cows are most thirsty. We quickly installed three new water troughs and now clean them all, twice a week. Milk yields increased instantly, and the cleaning only takes two of us an additional 30 minutes a week." Hoof-health issues, including white lines and abscesses, and the cost of lameness, were also flagged up in the report. "So we also filled in the small potholes around the water and feed troughs, installed rubber mats in the parlour, and custom-designed some matting to cover any grids," adds Sally. "We're super careful not to become complacent," adds Philip. "We have to maintain our high standards of attention to detail on a practical level, every day. That said, we have to accept a level of waste. "We want feed in front of our cows day and night, but we want to avoid wasting feed. So we're looking to cover the silos to prevent wet weather from affecting the dry matter of the silage. We expect this to improve the consistency of the diet consumed by the herd," he explains. "Contrary to what I was planning three years ago, and in line with the direction the team also wanted to take, coupled with additional environmental rules and regulations, we are now looking to stick with the same herd size and will continue to improve how we manage the unit to the best of our ability. "We'll also make the most of the advice, tools, systems and data we're currently using to maintain and advance our benchmarked performance status." |

Table 1: Norbreck Farm herd's key performance indicators

KPIs	September 2020	February 2021
average daily milk yield	35.1 litres	36.04 litres
butterfat	4.06%	4.14%
protein	3.09%	3.15%
feed conversion efficiency	1.35 litres/kg of feed	1.57 litres/kg of feed
margin over feed	6.59ppl	7.33ppl