



Homebred replacements calve between 22 and 24 months old

Fast track cows geared to achieving health, fertility and production targets

Precision milk production

During the past two years Warwickshire-based producers, Frank and Anthony Carter, have made a U-turn with their dairy, moving from a mainly flying herd to a data-led precision-managed system. By focussing on the key indicators and realistic targets they are aiming for a herd of efficient, fast-track cows.

text **Karen Wright**

Selecting dairy sires and implementing a breeding programme for replacements is relatively new territory for Frank Carter – prior to this he and his brother Anthony only bred about 25% of their herd to dairy bulls and raised just a handful of their own heifers. Calf and heifer rearing therefore became a more vital part of the business as well as taking control of herd health and fertility in their now year-round calving closed herd. Working closely with the Park Veterinary

Group's Peter Orpin and dairy consultant Rob Mintern, the pair have learned the ropes relatively quickly. "It was difficult to build on performance when we were buying in the majority of our heifers," says Frank. "We were also buying in problems."

A strategic review and economic analysis of the unit identified the key areas to focus on and where investments could be justified. Fertility was identified as a particularly important key performance

indicator (KPI) along with heifer rearing. Monitoring and fine-tuning through regular team briefings encouraged improvements.

Avoiding 'fads'

Every year the herd is benchmarked using InterHerd data with other herds within the Park Vet Group. In-house farmer training and benchmarking has shown what is possible and has motivated action. "It's a team approach and we all share clear strategies rather than jumping from one fad to another," says Peter, who has encouraged Frank and Anthony to maximise the use of their NMR records and track performance indicators for fertility and health through InterHerd and Myhealthyherd.

Fundamental to the success of the herd at Olde Farm, which is part of the 200-hectare arable and livestock unit just south of Rugby, is ensuring that it's running at capacity throughout the year to maximise annual milk production, as economically



Anthony Carter, Peter Orpin, Frank Carter, Rob Mintern and Tom Carter

as possible. While the current annual average yields are 10,522kg on twice-a-day milking, at 4.19% fat and 3.38% protein, the important figure is milk sold per year, which is close to 11,000kg per cow.

“This is why fertility is so important – it calls for a herd of fast track cows that get in calf easily and have healthy lactations,” adds Peter. “We seek to create a platform of a healthy herd with easy calvings, optimum intakes pre and post calving to maintain body condition, low cell counts and lameness-free cows. Slow track cows are a problem as they demand more inputs.”

Modifications have been made to support their aims including the daily use of a footbath, more regular foot trimming and effective digital dermatitis control. An investment in mattresses and cubicle improvements have aided cow comfort.

A health review through Myhealthyherd and completing the AHDB Dairy mastitis plan has resulted in a marked 40% reduction in clinical mastitis cases and a reduction in somatic cell count to 162,000cells/ml.

“We now dedicate more time to teat preparation,” says Frank, who shares milking herd duties with herdsman Alan

Warman. “We make sure that the clusters are attached to clean teats.”

BVD eradicated

Breeding their own replacements will also improve herd health. “We’re not buying in other people’s problems. We’ve already been able to eradicate BVD, vaccinated against IBR with an aim to eradicate it, and we have a robust Johne’s plan in place.”

Nutrition plays a vital part too. Regular contact with Rob keeps the cows on track. Dry matter intakes of 22.7kg are targeted with an energy density of 12.3MJ to preserve body condition and hoof pad integrity post calving.

The herd is managed as one group and fed a TMR, twice a day, which is made up of grass and maize silage, a protein blend, protected fat and a bespoke high quality mineral blend. The fat-to-protein ratio and fatty acid profile in milk samples is monitored and the ration is adjusted to maximise its benefit to fertility and ensure that dietary components are meeting requirements and not in excess.

“I’ll also get regular calls from Frank if there’s feed left in the feed passage or if milk quality deviates from expectation,”

says Rob. “This might be when they open a new silage clamp and we need to act quickly to prevent any impact on the milk price.” Milk is sold to Muller on a Dairy Crest liquid contract with bonuses for yield and fat.

Fertility efficiency boosted

Comparing the Carter’s key performance indicators with those in other herds shows that progress is being made. Calving interval is 368 days, well within NMR’s top 25% of herds, and the three month services per conception rate is 2.22, up from the 12 month rolling average of 2.32.

“They’ve made significant improvements year on year,” says Peter. “We now have 50% of cows in calf by 100 days and, most importantly, only 10% are not in calf by 200 days. Fertility efficiency – which is the percentage eligible for service that conceive – has improved by 50% during the past two years which is fantastic for a high yielding herd.”

Heifer rearing has also been improved dramatically. “The Myhealthyherd health evaluation showed that there is an opportunity to improve calf health with potential savings of more than £65 per calf reared,” says Peter.

Now, with an investment in calf hutches – that paid for themselves within six months through improved calf performance – a protein diet and individual weight monitoring, calves are targeted to increase their birth weight three fold by weaning at 12 weeks and should be fit for service at 12 to 13 months old. Removing BVD from the herd was a big step forward in young stock health too. Heifers now typically calve down to sexed semen at between 22 and 24 months.

“An ideal target is to have heifers back in calf by their second birthday,” says Anthony, who looks after calf and heifer rearing. “We find that heifers that calve at around 22 months old get back in calf easier than those that calve at 25 months plus.”

A tight calving interval and a low age at first calving, with few health problems, is contributing to an improved lifetime daily yield. This has increased from 11.6kg/day to 13.2kg/day during the past 12 months. “We’re reducing the number of unproductive days, which helps to boost our lifetime daily yield. And herd longevity is now increasing so we will soon be in a situation where we will have surplus heifers to sell and another income stream,” adds Frank. |

Calves are now reared in hutches

