
# Calf-rearing protocols key to driving performance

Reviewing feeding and weighing regimes in the birth-to-weaning phase of heifer rearing has helped one Dorset-based family to improve calf growth rates and optimise their system.

**TEXT** LAUREN GORINGE

Improving calf growth rates has been the focus on one Dorset-based unit for the past eight months and already Alan and Jane Helfer are reaping the rewards. The couple felt that their previous regime fell short when it came to successfully rearing the best replacement heifers for their Jersey herd.

The couple are second-generation producers and run a 70-cow pedigree Jersey herd at Knitson Farm, near Corfe Castle in Dorset. Their daughter and son-in-law, Sarah and Alan Brookes, work part-time on the farm while also working away from the farm as a relief milker and an agricultural contractor respectively.

With 60 cows in milk at any one time, the herd is milked through a Lely robot, which was installed in 2013, and all milk is sold to Craig's Farm Dairy, based just a few miles down the road.

"Our milk constituents are just what our buyer is after, at around 3.9% protein and 5.4% butterfat," says Jane.

"We are required to graze our cows during the summer months because that's what customers demand, and that works fine for us. We have low rainfall compared to the rest of the UK, but we have plenty of forage because we work hard to maximise our production and use of spring grass."

Robotic milking means that the cows are grazed in paddocks close to the unit, which are strip-grazed with a back fence. Cows are free to wander between grazing and the robot as they wish.

Cows are fed an 18% protein concentrate to yield through the robot and also have access to a TMR ration in the milking shed. This comprises maize and grass silage, distillers' grains, molasses, soya hulls, plus minerals.

Milk yields average around 7,700 litres per cow and heifers typically calve down and enter the all-year-round-calving herd at 22 months old.

"It was my mother's decision to milk Jerseys because she believed that they were easier to manage compared to other breeds, due to their temperament and their size," says Alan. "We used New Zealand genetics because they produced quiet animals, but since switching to a robotic milking system we've moved towards Danish or American bloodlines with more stature, to produce cows that better suit the robot and have room for the cluster to move freely beneath them."

## Growth rates

Jane is in charge of calf rearing from birth through to weaning and, since January this year, has taken a new approach with guidance from ForFarmers' young-stock specialist Emily Hayes.

"Jersey calves are small when they are born, often less than 30kg, but we just didn't feel that they were growing as well as they should be," explains Jane. "After attending a ForFarmers event on calf rearing we asked Emily to come and visit. She took a close look at what we were trying to achieve and gave us a complete list of protocols to follow for the entire calf-rearing process. It was exactly what I was hoping for and I haven't looked back since."

Emily explains the approach: "It is difficult to get large quantities of milk into small calves so, to ensure they are receiving enough protein for good bone development and frame, we decided to increase the milk replacer concentration to 180g per litre."

Calves are now fed one litre of good quality colostrum substitute as soon as possible, which Jane believes gives them the strength to feed effectively from their dam. Anything born in the colder months wears a calf jacket for the first four weeks.

After colostrum, calves are fed between 1.5 litres and two litres of VITAMILK HiPro Heifer milk replacer twice a day, moving from two to three litres per feed by 14 days. "Some of the smaller calves can't manage two litres twice a day, so if they don't want it in the afternoon and want to sleep instead then I don't push it," adds Jane.

*Table 1: Knitson Farm's milk powder feeding regime: birth-to-weaning phase*

| age | milk/calf/feed (litre) | feeds per day |
|---|---|---|
| 0-14 days | 1.5-2 | 2 |
| 2-6 weeks | 2-3 | 2 |
| 6 weeks | 2 | 2 |
| 8 weeks | 1 | 1 |

*Alan and Jane Helfer*

## Encourage intakes

At six weeks old, calves are cut back to two litres twice a day and milk is reduced to one litre once a day during the following fortnight, until they are eating enough concentrate, between1kg and 1.5kg a day, to wean.

"We've just started feeding VITA Start pellets, which are designed to smell like milk powder in order to encourage intakes. The calves have taken to them better than the feed they were on before," says Jane. "We've also moved from haylage to barley straw in the hay racks and they also seem to prefer this."

Calves are weighed regularly, by Jane, with a weigh band until weaning, and then every 60 days on weigh scales, by Alan, when they move into a larger group. "Weighing young stock allows us to monitor their growth and this tells us whether we can wean them as planned at eight weeks old and if they are ready to be turned out," explains Jane. "Any heifers that are not progressing as expected are just put back a pen to give them time to catch up. Emily is always on the end of the phone if I need her and that professional support is really appreciated."

"Jane and Alan do a brilliant job with the calves and their attention to detail is outstanding," adds Emily. "By weighing the calves regularly they can closely monitor young-stock progress and ensure that they enter the herd as strong and healthy heifers," concludes Emily. |


*Robotic system: the herd is milked through a Lely unit*