

# Changes boost calf performance

**NMR/RABDF Gold Cup winner Michael King explains how changes made to the calf rearing system at Two Pools Farm have led to improved heifer performance.**

At our last monthly visit by our consultant Danni Cooke from Promar, she commented about the growing number of young heifers we had and also the excellent growth rates that had been achieved during the last 18 months.

As on most farms we analyse the data from the milking cows continuously, but as things had

- Increased the milk fed to the calves at week three to five litres daily.
- Increased milk fed at four weeks to six litres daily.
- Increased the colostrum fed in the first 18 hours to six litres.
- Changed weaning to 10 weeks providing they are eating 2.0kg of concentrates daily plus hay.
- Testing colostrum density.



*Lyn Smith pasteurises milk before it is fed to the calves.*

been going well with the young cattle there was not the urgency to delve into the finer detail contained within the infinite amount of data we have.

This led to Lyn Smith (herd manager Martyn's wife) and me sitting down and doing our homework on what we had changed and what part of it had made the difference.

Firstly Lyn took over the rearing of all the calves from birth, through to six weeks post weaning in November 2010. She immediately made a number of changes to the calves on milk:

- Rotavec every cow and dams milk fed to her calf.
- Rehydration therapy changed to an electrolyte gel added to two litres of milk.
- Replaced the barley straw in the racks with hay, leading to an increased level of concentrate being eaten by weaning.

I must admit I was fairly sceptical to the last change at the time as we have learnt over the years hay makes calves pot bellied, doesn't it? I was soon proved wrong! In fact it seems that if they are offered hay from a day old they develop rumen function much

sooner leading to better growth rates and calves that grow on quickly post weaning.

In June last year we invested in a Dairy Tech Pasteuriser which has proved to be a real step forward on a



<b>Calf performance at Two Pools Farm</b>	October 2009 to March 2010	October 2010 to March 2011
Number of calves reared	81	72
Calf mortality	4.9%	4.2%
Calves treated for scours	15	3
Number of antibiotic treatments	54	16
Average age at 1st service	16.5 months	15.2 months

number of fronts. Practically it took the clock out of feeding the calves as you do not need to wait until the end of milking for the hospital group to be milked. The milk from the previous milking has already been pasteurised and the milk just needs to be reheated to temperature by pressing a button on the machine resulting in every calf being fed milk at the same temperature everyday until weaning.

Then there's the scientific bit. As we feed whole milk from high cell count cows and cows under treatment there was considerable risk of feeding the calves a high number of pathogens, as tests we carried out prior to pasteurising proved. Also it eliminates the risk of any disease cross over such as Johnes. Although we regularly test for it, it does help as added insurance.

The evidence suggests that the changes have resulted in better calf health and more immunity to fight diseases such as pneumonia. This has meant we have been able to stop vaccinating for pneumonia and reduce antibiotic use.

Post weaning the calves go into a group on the main dairy unit where their intakes are monitored for a month. Providing they are eating well they are then moved to the main young stock unit.

Good growth rates are then maintained throughout the different group stages leading up to bulling.

One of the benefits observed has been the reduction of age at first service which is now running

at 15.2 months for a well grown buller.

One of the disadvantages of having the bulling heifers away from the main unit is observation of heats. This is something we are trying to improve on and technology may be the answer. We are currently undertaking a



*Michael King.*

trial in conjunction with NMR using Silent Herdsman. The edge that this observation system seems to have is the accuracy and ability to transmit the signal back to the main dairy unit informing us that a heifer is bulling.

We do graze cows here at Kingspool albeit just the low yielders. It was an earlier opportunity than last year for them to have the much anticipated access to the grazing grounds and there is no better sight than 60 cows tearing around on a pleasant spring morning. We believe that if you let cows out to graze that they graze in the fields next to the roads so that the general public can see them and this is something we have adopted.

There are many large herds that successfully house cows 365 on very high welfare systems but unfortunately this does not stop the Daily Mail readers believing the biased reporting they are fed. So anything we can do as an industry to combat this is a must.

**• NMR and RABDF are hosting an open day at Two Pools Farm on Wednesday June 29. For more information and to register attendance (for catering purposes) ring RABDF on 0845 458 2711.**