

## **ANIMAL HEALTH AND EXPANDING HERD SIZE**

**Peter Edmondson**

**Shepton Veterinary Group**

**Shepton Mallet**

**Somerset BA4 5QH**

Due to the falling milk price many farmers are tempted to increase the herd size to try and dilute overheads to maintain profits. Many farmers are adding an extra 10 to 20 cows, whereas there are others who are taking the bull by the horns and doubling the herd size. Expanding the herd size can have minimal effect on animal health and fertility providing careful planning has been carried out.

The most common expansion at present is the herd who adds an extra 10 to 20 animals. This options looks very tempting as there is normally some spare accommodation available during the winter and so extra cows can be squeezed in. Of course with summer now approaching housing poses no problems and so expanding the herd is easy. The crunch time will come at the start of winter housing.

The current recommendation from FAWC (Farm Animal Welfare Council) is to have 5 to 10% more cubicles than cows. There are still many farmers who consider that you can have 10% more cows than cubicles. The biggest effect of overstocking cubicle houses is that many animals are going to be standing for longer periods than normal, and so this is going to increase the risk of lameness especially solar ulcers. In addition, if the winter housing is overstocked then oestrous detection becomes more difficult as there will be less space available in the loafing area.

The current recommendation for loose housing is 6 sqm of lying area per cow and 2 sqm loafing area. When loose yards are overstocked the incidence of *Strep uberis* mastitis increases. This has been seen in one of our herds last winter where they increased the stocking rate by 20% on previous years and doubled the incidence of clinical mastitis.

Good feeding is essential to achieve high milk yields and good fertility. The amount of feeding space available for cows is often an area that can be overlooked. If this is restricted, then some animals might not take in the optimum amount of feed each day. Heifers and other animals further down the pecking order may come to feed and find that all the choice forage has been eaten by the cows and they are left with the less palatable food resulting in reduced dry matter intake. This is likely to cause problems especially in heifers as these animals also are still growing to their adult size.

The majority of my clients who have expanded their herd by 10% have carried on milking their cows through the existing milking parlour. Milking time is generally increased and as these individuals have more work to do in looking after these extra cows, they tend to want to reduce milking time. The temptation is to reduce the milking routine down to a basic minimum. This can compromise udder health, and reduce milk quality and increase clinical mastitis.

In order to expand the herd by 10 to 15 % it is essential that winter accommodation, nutrition and feeding space, and the milking routine are not compromised to ensure that animals can maintain good milk yields with minimal effects on fertility and other diseases.

We have a couple of clients who have taken the decision to double the herd size. They have either built a new dairy unit on a green field site or expanded the existing buildings and parlour. In general if you double the herd size then the problems on the herd quadruple and so the first consideration has to be the capability of the staff working on the dairy. Are they trained and capable of carrying out the extra duties that are expected, or is the farm going to be understaffed where the enthusiasm to carryout the job properly and attention to detail starts to slip.

Good records are important in order to manage any dairy herd correctly. It is essential to keep track of where cows are in relation to their fertility cycle and lactation, so that the herdsman serves cows at the correct time after calving, and dries off the correct time on the right date etc.

Many people decide that the sensible way forward is to install an on-farm computer. Is the herdsman computer minded, will he have time to accurately enter the data regularly and also be able to manage the information efficiently, or is this going to compromise his other duties such as heat detection and milking.

The big temptation is to install a new parlour, and some of our clients believed that the bigger the parlour, the bigger the throughput. Many have found that this is far from the case and that the throughput of a big parlour is little different from their old smaller parlour unless the numbers of milkers is increased.

One of our clients installed a 16/32 for one milker and was unhappy about the throughput of cows and contacted his dealer. He decided the way to increase throughput was to stop pre-

dipping and fore stripping, and just to wipe off any dirt from the surface of the teat with his hand and attach the milking machine. To me, this is a backward step rather than a step forward.

A big herd will require good fertility to avoid high culling rates so the importance of nutrition, heat detection, and good records cannot be underestimated. If the farm uses DIY AI, are there adequate stalls to restrain cows or are they to be inseminated behind a gate? One of our DIY AI clients decided it would be cheaper to install stanchions. What he didn't realise was that once the stanchions were installed the cows could move freely from left to right and so his conception rate suffered.

Winter accommodation is very important. I believe that cows should stand up to be milked and to feed, and for the rest of their time they should be lying down making milk and chewing the cud. For this reason, careful attention should be given to winter housing to ensure that the design of cubicles or loose yards ensures that cows have maximum comfort so that they are encouraged to lie down for long periods of time. The shed should be well ventilated and loose yards cleaned out regularly to avoid outbreaks of clinical mastitis.

A comfortable bed means everything to a cow and this was shown in research work carried out in our practice in 1989. This found that cows on concrete cubicles bedded with a scant amount of straw lay down for 8 hours a day, compared to cows bedded on deep straw who lay down for 14 hours a day. The cows on poorly bedded cubicles had a very high incidence of solar ulcers and lameness that resulted in weight loss, reduced milk yield, poor fertility and increased culling rates.

The feeding system should allow plenty of feed space and the presentation of quality feed. Feed troughs should be sheltered from adverse weather to ensure the cows can feed in comfort, and must be cleaned out regularly as spoilt forage ferments and taints the feed on top.

All too frequently the temptation is to increase the size of the herd as rapidly as possible to take advantage of the extra revenue generated from extra cows. Planning is not always given top priority. This is often seen by examining the layout of winter housing and new facilities and discovering that basic mistakes have occurred. The next step is to try and overcome the problems that have arisen as a result of poor design and poor planning and often there is a compromise between what farmer would like to have achieved and what is achievable using the facilities that have been built and the resources available.

It is very easy for dairy farmers to overlook problems that can occur in animal health when expanding the dairy herd. I think that farmers would benefit greatly by talking to their vet about their future plans and taking this advice into consideration to minimise any negative effects that might occur as a result of expansion.

Unfortunately, we encounter dairy farmers who have expanded their herd and have discovered that the extra losses due to poor fertility, increased mastitis and lameness, and other diseases have offset the extra revenue gained from increased milk yield. This has resulted in no real increase in farm profit and in some herds profits have fallen. Good planning results in good management. Dairy farmers working in partnership with their vet can to reduce the effects of possible problems by using foresight, and help to maximise profit