

Good cattle housing helps to ensure a healthy herd

Getting the buildings right helps minimise health problems and all their attendant costs while maintaining good yields, vets tell **Heather Briggs**

Keeping young calves in separate housing from older ones can make a big difference to the numbers becoming sick with acute bovine respiratory disorder (ABRD) and other viruses such as diarrhoea, says specialist large animal veterinary surgeon Tim Briggs from the Nantwich Farm Vet Group.

"Calves that are slightly older have more resistance, and can act as carriers of disease that then infect the younger, more vulnerable calves," he explains, noting that an outbreak of sickness not only creates animal welfare issues, but also can place a considerable economic burden on dairy and beef farms as costs include clinical treatment, mortalities, reduced growth rates and additional labour.

"Good ventilation is vital, but it's not the whole story," he says. "It's also important to keep different groups separately, in different air spaces – and this extends to the whole herd."

TOO MUCH AIRSPACE

Alex McPherson of Drove Veterinary Practice in Swindon agrees, adding that roof height in adult buildings can cause additional problems, even if the younger calves are separate from their older counterparts. "When you have a high ceiling there is too much air-space and they can get cold very quickly," he says. "Ideally they need to have a special size, and 'calf kennels' can be really useful."

These portable units come individually or in blocks of six to 10. The roof is a white dome and there is a loafing yard at the front. "These are ideal," says Mr McPherson. "If it's cold they can go inside, if it's a nice day they can go and enjoy the sunshine."

"The calves are not alone, so they don't get stressed, but at the same time there is no physical contact between them and that helps prevent bugs being passed from one to another. It's well worth the extra labour in managing them."

Mr Briggs emphasises that lactating dairy cows expend a lot of energy producing milk, so providing them with a comfortable place



Calves grow rapidly over winter, so producers need to plan for this in their housing strategy

to rest is vital to both production and welfare. "Care should be taken in the design of the cubicle and the base needs to be long enough to allow the cow to lie in the cubicle without her hindquarters overhanging the edge."

Both vets are advocates of encouraging cows to lie down by using rubber matting and ensuring there is sufficient space. Cubicle divisions should be wide enough to allow the cow to lie down easily, and should not be positioned so that the cow rubs her legs or neck against them when resting or when getting up or lying down.

Mr Briggs says: "I have seen a lot of places where the cubicles are just too small and uncomfortable for today's cows, often resulting in swollen hocks and knees. The average time spent resting is just over 11 hours per day – and if the cows are not lying down long enough, so they don't chew the cud sufficiently and this results in poor digestion and lower yields."

Mr McPherson adds that when Holsteins lie in the wrong place they place their dung in inappropriate areas, often leading to dirty udders and the risk of mastitis.

"There are a number of different beddings on the market, some traditional and some new ones. We have been looking closely at the results from using a biodigester – an anaerobic digester that recycles manure into a dry, grey matter

that can be used for bedding.

"I admit that I was dubious at first, but so far we have had no additional cases of mastitis," he says. "Moreover, as it's free, farmers tend to be more generous with it than they would with straw or sawdust mattresses and that's a good thing as it means better cow comfort."

Good flooring is vital in preventing foot damage such as white line disease but the vets remind producers that new concrete is very rough until it 'wears in'. The vets encourage farmers with old flooring to make the most of the opportunity of the current grants to regroove the concrete.

Mr McPherson comments: "You sometimes see the cows queuing to bull because there is only one space where the floor is sufficiently safe and comfortable to do so. That is a big warning sign that you need to do something – and fertility is an integral part of your profit!"

EXPOSURE TO LIGHT

He also draws attention to lighting, as well-lit cattle housing improves operator efficiency, comfort and safety in addition to increasing milk production by regulating the dairy cow's exposure to light. Milking cows exposed to 16 to 18 hours of light with a brightness of 160-200 lux, followed by six to eight hours of darkness, has consistently increased their milk yields by two litres more than in a natural photo period.

Mr Briggs explains: "Light hitting the eye of the cow activates certain hormones that suppresses the release of the hormone melatonin and increases the production of IGF-1, which encourages the mammary gland to produce more milk."

SUFFICIENT VENTILATION

Both vets emphasise that ventilation and a relatively constant air temperature are very important to cattle health. "The buildings should provide sufficient ventilation throughout the year for the type, size and number of stock to be housed – and where appropriate, roofs should be insulated," says Mr Briggs.

"If the ventilation in existing buildings is not good enough, improvements can be made by modifying air inlets and outlets, or by using mechanical equipment (such as a fan). The direction of the prevailing wind should also be taken into account when altering or constructing new buildings."

One of the challenges is the speed with which the calves grow over the winter period. Mr McPherson says: "Young calves go into their housing at the start of winter, and have plenty of room. But before spring, they have grown so much that they don't have enough room, and this can cause stress and bullying. It's a good idea to think your strategy through before winter, and make the appropriate adjustments."

Insufficient space can be an issue and there should always be plenty of room for cows to be able to pass one another in the passages, and have enough space to be able to relax and socialise with each other.

"I strongly advise producers to make sure there are more than sufficient cubicles to lie in, and plenty of feed-space for the cattle to be able to avoid the bullies at feeding time," he says, commenting that the less stressed the cows are, the easier they are to handle. "One of the telling signs that the cows are stressed is cleanliness – if the legs and udder are dirty you have a problem."