Create space and relieve pressure

Many herds are now out for the summer, so what no- and low-cost changes and improvements could be made to housing to improve cow comfort and reduce pressure on existing facilities?

TEXT RACHAEL PORTER

While the producers under intense financial pressure, any improvements to cow comfort, health and welfare in cow housing are very much about working with what you've got. Maybe this is the year to reduce numbers to take the pressure off buildings – rather than altering or improving buildings to take the pressure off the cows? So asks Promar consultant Paul Henman, who adds that currently there's also a lot of pressure on staff. "Both physically and mentally. And this can be the case in any year – not just one like the one we're facing at the moment."

He says that on many units facilities, routines, cows and people are stretched: "Almost to breaking point. People, in particular, are 'running hard' all winter to keep pace with milkers who are performing well, but at a price. And that price is hard work – to provide these cows with enough space, feed, water, milking time, good health and fertility. It's a long and exhausting list," he says. Interesting, then, that when these same cows are turned out in spring, their yields often increase. "This is because they have more space to feed and to lie down. And there's also an increase in the milk yield from forage – a high driver for efficiency.

"Which begs the question, why do so many producers run their herds in such a 'competitive' environment during the winter?"

He says that producers should take a closer look at how to reduce the pressure on the infrastructure and buildings that they have. "It's about managing what you already have."

More space

Just a few extra cows creates additional competition for the vulnerable heifers and less dominant milkers in the herd. "So freeing up space, rather than creating more space, can be the answer. It doesn't get more low- or no-cost than that."

And this might mean reducing the pressures on housing by reducing heifer age at first calving. "Aiming to calve at two years old, rather than 2.5 or even three years, means that producers can actually reduce young-stock numbers on their unit. A herd requiring 50 heifer replacements each year would be carrying 100 head at any one time if calving at 24 months. But that increases to 125 head if they're calving at 30 months: "And you're carrying more larger animals as age at first calving increases, which puts even more pressure on housing and slurry handling facilities, for example. "So reducing age at first calving is a good starting point. It frees up space, which can be allocated to the milking herd, and also reduces the cost of rearing heifers." If the unit has a beef enterprise, it may be that producers reassess if that's actually making a profit and if that space, again, would see a better return if allocated to the dairy herd. "And contract rearing heifers away from the farm could be another way to reduce the pressure on existing buildings and facilities. "Freeing up space and creating more capacity is a low-

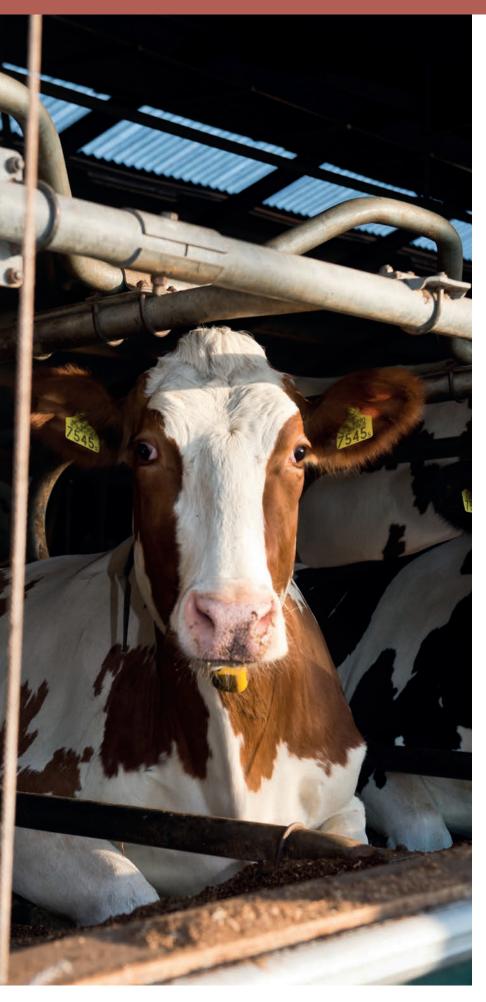
cost option on many units."

Another is making minor alterations to what's already there and scoring 'big wins'. Poor ventilation remains an issue in many cow houses, according to AHDB Dairy's David Ball.

"But, when it comes to making improvements, it can be as simple as removing ridge sheets or side wall cladding. It has to be done with care, particularly when working at height, but it's easy to do and costs little more than time in most instances.

Fresh air

Many rooves have cranked crown ridges, usually made from fibre cement. "These can be taken off, providing the gap created isn't directly above a bedding area. This will create a much larger opening for warm and stale air to rise up and escape from the shed – creating the stack effect. And a good ridge outlet will help to draw fresh air into the shed, so make sure you've good inlets too and remove boarding and cladding if required. "Another low-cost job when you're working on the roof could be to paint any skylights with white reflective paint, to allow light to pass through but to reflect heat. This can reduce any hotspots in the shed, which will



exacerbate any ventilation and humidity issues," adds Mr Ball. "For good natural ventilation, a general rule is to provide $0.1m^2$ of ridge outlet per cow. More accurate calculations can be done using the AHDB ventilation calculator. So check to see if your shed meets this standard.

"It's time well spent because poor ventilation, higher humidity and damp sheds and bedding create ideal conditions for mastitis-causing pathogens to multiply. Improve ventilation, increase air flow through the cow shed and reduce humidity and you reduce the ability of those bugs to thrive and survive. And you'll also create a more pleasant environment for the cows to live in – and for staff to work in."

Water troughs are another area that can often benefit from improvement – be it their position, their size and capacity, how many there are, or how fast they refill. "Lots to think about here but, as a starting point, it's well worth checking that you have enough water trough space for the number of cows housed in the shed," says Mr Ball. "Providing 100mm of water-trough space per cow will meet farm assurance scheme standards and also easily ensure that all cows have adequate access to drink. "But also check the water pressure and filling rate. Trough space is one thing, but it's no use to the cow if the trough is empty when she gets there. You could have 150mm of water trough space per cow, but if flow rate is poor then that won't be adequate. So check that – it's something that's often overlooked.

"And now is the time to tackle that, while the cows are out. Change ball valves, sort out pipework. Do whatever it takes to get those troughs filling quickly between drinking cows."

He says that trough positioning is important too. "Make sure cows have good access and that they don't create bottle necks. And it's important to have more than one trough too. Higher-ranking cows can, literally, dominate a trough and more timid cows will be too afraid to go and drink. So make sure there's an alternative trough that's just as easy to get to."

Reduce humidity

Flooring is another important area to review and make any improvements while cows are outdoors. Access or movement around the shed can be hampered by damaged or uneven concrete. "Again, something that's relatively quick and low-cost to fix. If you've areas where water and slurry tend to pool and the concrete needs repairing, get on and do it," says Mr Ball. Tackling these areas will reduce the risk of damage to cows' feet. Sheds should be as dry as possible, to reduce humidity and the risk of diseases like mastitis and digital dermatitis. Smooth, even surfaces are easier to scrape clean and to keep well drained and dry. It is always money well spent."

So take the time to assess buildings and make some low-cost repairs and alterations. "The small and simple adjustments and changes can make large and unexpected improvements to cow comfort and herd performance. And that could make all the difference as we head into another period of uncertainty and potential milk-price pressure."