

**Martin Wilson**

Closer attention to young stock rearing is paying dividends across this progressive dairy business, which is looking to expand herd size.



Number of cows:	165
Number of young stock:	160
Average yield:	9,400 litres
Quantity of land:	87 hectares

Less is more with new dairy calf housing at Martin and Karen's Wilson's Broadlea Farm, Eaglesfield, near Lockerbie.

A new calf building is just one of many recent investments at the 87-hectare unit where they milk their 165-cow commercial Holstein herd, which is currently averaging 9,400 litres. But it's made the biggest impact on the day-to-day efficiency and productivity of their business.

Concerned about the incidence of pneumonia and calf mortality levels, Martin decided on an open-sided double-span building with free access from calf pens to five fibreglass outdoor igloos. And not only has calf health improved massively, while vaccination and treatment costs have disappeared, but the shed and igloos were just over half the cost of a more traditional clad and insulated building. Payback on the whole investment, including labour, is likely to be around eight years.

Served earlier

Just two years on and the first batch of heifers reared in the new building will begin calving in June. Not only have the heifers stayed completely free of pneumonia, with mortality down to nil, but their growth has been such that heifers are being served earlier – at 14 months – to calve at 23 months old. Thanks to the success of the new shed, which has an automatic calf rearer, 72 heifers from the farm's 160 young stock are due to come into the herd, enabling

A unique set up has reduced age at first calving

Five-star accommodation

Investing in a unique calf housing set up has paid dividends for one Lockerbie-based producer. He's improved heifer health and welfare and now calves them for the first time at less than two years old. We visited the unit to find out why other producers are looking to copy his system.

text **Jennifer Mackenzie**

the Wilsons to gradually expand herd numbers to an optimum 250 milkers. These replacements are daughters of Dutch bulls from Avoncroft, namely Poos Stadel Classic Red, Barendonk Trendsetter, another Classic Red son, Huybens Red Devil and Beukenhof 346 Ideal.

Martin's focus on the herd is not on production but on the type of cow. "We have totally capped size. Big cows are nice to look at but they don't last. We're looking for smaller cows with more 'heart' – a bigger chest capacity coupled with improved legs and feet. That's something we have always focused on," says Martin, who is reluctant to buy in replacements.

With size in mind, more red-and-white Holstein bloodlines are being used and the entire herd is now put to the dairy bull. Heifers have been running with a Classic Red son on an indoor wood-grain bedded corral. The bedding is made from pallets that are ground to the size of barley grains.

"We have built and altered probably 90% of the farm buildings and five years ago we made the big mistake of converting a Dutch barn with a lean-to on each side into the calf house," says Martin, who moved to Lockerbie from Southwaite, in Cumbria, in 2000.

"We used it for three years but we had no end of problems and the best thing we did was to knock it down. We saw the igloos, which are made by German company Holm and Laue, in a magazine article and we were immediately

impressed by the system. "We used the igloos for the first winter without the adjoining new building, which was

already planned for the old building site, and that winter temperatures dropped to -18°C at night and were as low as -14°C during the day. Yet the igloos provided a perfect microclimate for the calves and they thrived. The calves easily survived the cold but when it was wet and windy they went into the igloos for shelter," he adds.

The new 37x15m building has five 25-square-metre pens that adjoin the 4.4m diameter igloos. At one end of the shed there are 12 calf cubicles for training and this is the only side of the building that is clad as there is no access to an igloo.

A two-metre overhang at the roof eaves helps keep the worst of the rain out of the building but Martin has found that even if the bedding gets wet it dries just as quickly because of the airy conditions.

There is also a dry room in the centre of the building that houses the automatic calf feeder, milk powder and calf cake. During the last severe winter it was possible to heat this room to prevent the

machine from freezing up. The pens are created solely by gates – the only fixtures other than feeding troughs and the cubicles – that can be arranged for access for mucking out and to form a handling race within each pen.

Mucking out is done religiously when the bedding gets to 300mm deep to reduce the ammonia levels and coccidiosis risk.

Health benefits

New born calves are taken off their dams before the first milking. With the herd testing negative for Johne's disease, they are fed pooled colostrum twice a day in individual pens for the next six days before being moved into the new shed. They are then fed on the calf feed system for the next 58 days until they are automatically weaned.

When they are first housed, each pen and igloo can accommodate up to 18 calves and as they grow the space at the feed barrier dictates how many are left in each pen. The shed can hold up to 80 calves.

At five months old they are moved into another cubicle building with an automatic scraper. "The whole system has health and welfare benefits and being able to have large groups of calves fed automatically it is also labour saving and staff friendly," says Martin, who employs one full-time man.

"The system has improved calf health and mortality 100%. During the past 18 months we haven't had to treat any calf for pneumonia and nor have we vaccinated to prevent it.

"The biggest cost is not necessarily losing a calf to pneumonia but the fact that the calf that recovers from the disease never performs as well. I can pick out the cows and heifers in the herd that have had pneumonia because of their general condition and inability to thrive," explains Martin.

"We are aiming to calve the heifers at two years old and by bulling our criteria is for the animals to weigh a minimum of 350kg and be 1.26m tall at the withers. Heifers are now easily achieving this by 12 months old," he adds. |



Unique system: other producers are interested in copying Martin's set up and emulating his heifer rearing success