Reaping the rewards of robotic system

Installing an automated milking set up and revising feeding strategies has seen one Scottish producer expand herd size and increase average yields. We spoke to them to find out more.

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Good quality: forage is the building block on which the herd ration is based

Striving to reach the next level of dairy efficiency, while seeking a positive lifestyle change, led the Glasgow-based Brewster family to invest in robotic milking on their 230-cow dairy unit. And their decision has been well rewarded, with improved milk production, increased herd fertility, and more time to spend on cow management.

Brothers David and John (Jack) Brewster, farm in partnership at Boclair Farm in Bearsden, just outside





David (left) and John Brewster

Glasgow. The farm comprises 350 hectares with just under half in arable rotation, growing barley, wheat and oats.

Back in 2015 the brothers were successfully managing a 180-cow herd on a summer grazing system and feeding a TMR during the winter. While they had achieved good average annual yields of 10,500 litres a cow and a calving index of 425, they felt that the herd could 'do better' and started to look at ways to further improve performance.

Robotic system

"Having seen, first-hand, the success of several robotic systems and after careful consideration of the direction we wanted to take the herd, we decided to install our first robots," says David.

"We also began using sexed semen on all cows and heifers, allowing us to be more selective when it came to breeding replacements. We focused on milk production, health and fertility – traits that we feel are most important to breed efficient cows."

The farm now has four Lely robots and the milking herd has expanded. Average yield has increased to 13,000 litres per cow, at 3.82% fat and 3.20% protein, while the calving index has dropped to 400 days.

While the family source feed through Quest Farm Supplies, the brothers work closely with ForFarmers' Christina Pollock. She helps to manage cow nutrition. The change to a robotic system gave the Brewsters the opportunity to review their feeding plan and come up with a new, comprehensive strategy to help improve milk production.

"One of our key aims is to provide a ration that supports milk production, as well as cow health and fertility, across the whole lactation," says David.

"Our high-quality forages are the building block on which the whole ration is based. Christina uses forage analysis data to formulate a balanced ration that makes the best use of this resource."

The cows' ration comprises grass silage, straw, dried or crimped home-grown barley, maize distillers', a fibre source (typically sugar beet), and protected rape. A concentrate from ForFarmers' Maxima range, a high specification feed to help support animal performance, is fed via the robots. Lintec is also added to rations to help support health and fertility.

"We are working with exceptionally high performing cows and so everything that's offered at the feed barrier needs to have a role and do its job properly," says Christina.

From three weeks before calving, all heifers and cows receive Translac Advance, which provides extra nutritional support during the transition periods.

"With a robotic system, yields can be pretty high right from the start of the lactation," explains David. "This feed additive helps to prime the cow's system for this demand and helps avoid health issues in those first crucial weeks of lactation."

Maintaining longevity

David is proud of the family's ability to achieve longevity in the milking herd, alongside productivity, with a replacement rate of just 16% in 2019.

Breeding has played a role here. The Brewsters are renowned for breeding good cows and the family has always run a pedigree Holstein herd, with David and John's father a past President of Holstein UK.

In 2017, the Boclair herd was named Holstein UK Premier Pedigree Herd – the first Scottish herd to ever win the award.

"As a breeder, this is the award you want to win," says David. The previous year, he and John also won the prestigious Master Breeder Award for the second time – an award that can only be won every 10 years.

As a result, there is a good market for the herd's genetics, which now provides a significant income stream for the business.

"Attention to detail in all aspects of herd management has also been key to the success and progress of the herd at Boclair," continues Christina. "David and John consider everything carefully before making any change to herd management."

The switch to robotic milking has given them a degree of freedom, with less rigidity around milking times. "This has given us more time to manage the cows, freeing up the time to assess and act on the increased data we receive via the robots and heat detection monitors.

"It's not about doing less work," stresses David. "It's about concentrating efforts in the right areas and being able to be more responsive when it's needed." |



Automatic milking system: four Lely robots have been installed at the unit