



TMR feeding: a robot is used to regularly push feed up to the barrier

First-time ‘lucky’ for Gold Cup-winning herd

We spoke to the winner of the 2019 NMR/RABDF Gold Cup to find out how his family’s Ayrshire-based dairy business wowed the judges and lifted the dairy industry’s most coveted trophy.

TEXT JENNIFER MACKENZIE

Robert Sloan is still reeling from the surprise of winning the 2019 NMR/RABDF Gold Cup. He says that it was a thrill to make it through to the final six and that he really didn’t expect his name to be called out at the award presentation in February. “Everyone dreams of winning the UK dairy industry’s most prestigious award. Just to be shortlisted is an amazing achievement. Winning was the icing on the cake.” And the best feedback from the judges was a

comment about how well his cows looked. “That, for me, was the ultimate compliment. It’s what we set out to do every day – look after the cows as well as possible. Everything else – good health, fertility, efficiency and productivity – should then follow. Cow health, welfare and comfort are our top priority and for someone to recognise that – and for it to be one of the reasons why we won – well, that really made my day.” Robert runs the 180-cow Townlaw Holstein herd,

COMPANY PROFILE

System :	all-year-round calving
Farm size :	205 hectares
Feeding :	TMR, with individuals topped up with concentrate via the robots
Milk buyer :	Graham's Dairy
Holstein herd	
Herd size :	180 cows
Average yield :	11,980kg, 3.99% butterfat and 3.13% protein
SCC :	116,000 cells/ml
Calving interval :	427 days
Jersey herd	
Herd size :	60 cows
Average yield :	7,115kg at 6.02% fat, 4.01% protein
SCC :	79,000 cells/ml
Calving interval :	394 days

at Darnlaw Farm in Auchinleck near Ayr, with his parents, Bryce and Anne, and wife, Emma. The Sloan family has adopted a proactive approach to succession and Robert, who's 37, became a partner in the business when he was 24. He says that his youthful enthusiasm and his father's experience and wisdom has driven the business forward during the past decade.

Flexible working

The herd has been based at Darnlaw for more than 40 years and in 2011 the decision was made to switch to robotic milking, in a new purpose-built shed on a greenfield site at the farm.

"Back then we needed to start milking three times a day to improve the welfare and longevity of our 120 high yielding cows. But finding staff who were prepared to do this and to work the antisocial hours was a challenge," says Robert. "So, instead, we decided to install robots."

The herd is housed all year round and milked through three Lely robots. "Our system works well. We employ three local men and each staff member

Robert and Emma Sloan were presented with the industry's most prestigious award at Dairy-Tech 2020



NMR/RADBF Gold Cup 2019 winners, Robert and Bryce Sloan

works up to 50 hours a week – but rarely more than four and a half days a week. This gives our staff time to pursue their own interests and have time off at the weekend.

"The level of automation on our farm allows for flexible working hours with minimal anti-social labour requirements," he adds. "Everyone has their own individual responsibilities, but they are also expected to step in and provide relief for any job on the farm. It is this diversity that keeps everyone challenged and motivated."

Another major change and 'diversification' took place in 2016 when they took the opportunity to fulfil a specialist Jersey milk contract from milk buyer Graham's Dairy and established Darnlaw Jerseys. This herd of 60 cows is run separately and milked twice a day through the original parlour, grazing in summer and housed in winter.

Robotic system

"We started with two robots in 2011 and added the third in 2013. When we established the Jersey herd we reduced the number of Holstein cows from 220 to 180 and we stopped milking the late-lactation Holstein cows through the parlour, keeping this strictly for the Jerseys," says Robert.

The 180 Holsteins – 43 classified EX and 76 classified VG – currently in the herd milk well on the robotic system, which is reflected in their yields and longevity. "In 2018 we had eight 100-tonne cows, a herd replacement rate of 19%, and an average lifetime yield of 46,000kg. The herd was placed first on combined production and inspection in the Scottish herds competition. And we were also recognised in 2018 with a Master Breeder award from Holstein UK," adds Robert.

Despite running two herds with different management styles, the Sloan family's priority is cattle health, welfare and longevity. All cattle are bred to maintain and improve functional type. "Our robotic system allows us to run extended lactations on certain cows. Long, level lactation



▲
Jersey herd: milk is sold
to Graham's Dairy

curves are a key component to the longevity of our cows, with breeding decisions and rations formulated to encourage this," says Robert. Further investment was made in calf housing in 2018. Calves are reared in individual pens for the first seven days before being batched in groups of 20 on an automatic feeder. Calves are weaned at 64 days old and moved as a batch with an all-in-all-out approach, which allows pens to be thoroughly washed, disinfected and given time to dry before the next batch. Calve growth rates average 0.89kg live weight gain per day. Providing a regular income stream are pedigree cattle sales, both Holstein and Jersey, which account for 15% of income and in 2018 were equivalent to more than 6ppl. "The Jerseys are usually sold as in-calf heifers, served to a black Limousin bull. Holstein heifers are sold freshly calved and there is an increasing demand for robot-trained cattle as more producers are using these systems," says Robert.

Top priority

Cow cleanliness is a top priority and a Clusterflush system operates in the parlour with Pura steam on the robots to prevent cross contamination. Cows are bedded with sawdust and hydrated lime on mattresses. Any cases of mastitis are sampled and frozen in case of a major breakdown, to allow samples to be cultured quickly to identify the strain of mastitis that's causing the problem. "E-coli can be a problem here," adds Robert. "With the removal of critically important antibiotics as a safety net for any of these cases, we have started

vaccinating the herd for mastitis to hopefully further prevent antibiotic usage."

He adds that lame cows and robots 'do not mix'. "Any form of lameness is treated as an emergency. We have an extremely proactive foot health policy. Foot baths twice a week and udder cleft conditioning means that there have been no cases of digital dermatitis during the past 24 months."

Family-run unit

Both herds are fed a silage-based TMR. The Jerseys are fed 0.9kg blend and 1.8kg alpha wheat and topped up to yield in the parlour to a maximum of 5kg concentrate. The Holsteins are fed 1.8kg blend, with 4.5kg of alpha wheat, 1.2kg molasses, and 4kg of draff, and they are fed concentrate to yield in the robot to 12kg a day.

With heavy clay soils and 1,422mm of annual rainfall, forage is based solely on grass silage and some wholecrop spring wheat. They make enough first-cut grass silage off 134 hectares to feed all the cows all year.

"Being a family-run unit means that we can change direction quickly in what can be volatile market conditions. In the short term, our Jersey contract is our biggest opportunity – the milk is used for specialist high-end products such as gold top milk, skyr and high protein yoghurt," says Robert. "With a shortage of young people entering the dairy industry, our system and work environment will hopefully encourage the next generation. And the challenging skill set we require should ultimately relate to a salary comparable to any professional career." |