Dairy-4-Future
Pilot farmers meet on-farm and online

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College of Agriculture, Food & Rural Enterprise

Dairy-4-Future is an EU Interreg funded project, with CAFRE as one of eleven partners from the Atlantic region of Western Europe. As part of the project the ten farmer members meet together three to four times a year on each other's farms.

The first visit in 2020 in March was to Stephen and Mark Montgomery in Eglinton. The two brothers farm in partnership, milking 180 Holstein cows in a tight autumn block calving pattern. The family were the runners up in the NMR Gold Cup competition in 2019, which was an outstanding achievement for the family amidst strong competition from right across the UK.

During the meeting, Stephen gave the farmers a guided tour of the farm yard beginning in the calf rearing shed, moving to the milking parlour and handling facilities, leading into the cow shed and finishing with the heifer shed. All cows were housed and were feeding and lying very contentedly, despite the poor weather conditions outside. There were a good numbers of questions from the farmers and it was clear that the Montgomery's attention to detail was at a very high level, right across the cows, the yard facilities and the land.

Farmers discussing results at the Montgomery farm

Following lunch, Martin Mulholland reviewed ammonia emissions data which had been calculated on the farms for the 2018 year. The emissions were broken down into nitrogen excretion, inorganic fertiliser application, housing, manure storage, manure application and grazing. The farmers were able to compare their own results with the rest of the group and discuss the reasons behind the variation in each ammonia emission source. A number of different scenarios were ran for the farmers benefit, including the implication of swapping their fertiliser application from Urea to CAN and their slurry application from splash plate to trailing shoe.

As a result of the Covid-19 restrictions the visit to Thomas Steele's farm in Kircubben in June was online.

Rowreagh farm owned by the Steele family, is farmed by Thomas, his brother Samuel and their parents, milking slightly over 500 Holstein cows in a fully housed, all year round calving system. The cows are milked three times a day through a rotary parlour.

The cows are fed a TMR ration comprising off grass silage, whole crop wheat, maize silage, and Lucerne, all of which is home grown on the farm. Grass silage is produced in a four cut system, with a high importance placed on harvesting and ensiling high quality forage.

The virtual farm visit commenced by viewing a video of the Rowreagh farm for the farmers, in which Thomas outlined the various technologies used on the farm. These included rain water harvesting, heat recovery, GPS and variable rate fertiliser sowing, the rotary milking parlour and low emission slurry spreading. This gave the farmers a good feel for the farm from the comfort of their own homes and sparked plenty of questions and debate around the systems practiced. A particular topic of interest was the area of breeding and calf rearing, including heat detection, sire selection criteria, the timing of service and conception rates to first service across cows and heifers.

Thomas was asked how the dry spring of 2020 had been affecting his grass growth on his freely draining soils. Following on with this topic each of the farmers gave an update on how the weather had been affecting their own farms, with a strong difference noted between those in the east and those in the west.

Rotary milking parlour on the Steele farm

Martin Mulholland gave the farmers an update on the Dairy-4-Future project in light of Coronavirus and the implications that it has had on planned exchange visits and communication events.

Prior to the meeting, each of the farmers had received a financial sustainability report on their own farm business prior to the meeting, which reported on their profitability, and financial efficiency measures and their physical and technical performance. It plotted their own figures against the Dairy-4-Future UK average and against the UK top 25%. These reports where explained to and discussed the farmers.

The aim of the Dairy-4-Future project is to increase the competitiveness, sustainability and resilience of dairy farms through the development of innovative and efficient dairy systems and increased cooperation between research and development stakeholder groups.

Ten Northern Ireland dairy farms were selected as pilot farmers through project agreed selection criteria, including good technical and environmental performances, motivated individuals and innovative dairy farms that are testing novel dairy systems or working in close collaboration with research and development. The ten farmers are spread across the Northern Ireland and operate a range of dairying systems, herd sizes, cow breed and calving pattern.

All of the farmers have agreed to provide detailed physical and financial business data as part of the project. Data collected includes livestock numbers and movements, milk production, fertiliser inputs, concentrate feed inputs, contractor use, energy and fuel use, land use, plastic and chemical use, manure storage and manure application. The data is used to assess and compare economic, environmental and social sustainability of dairy farming systems across the Atlantic region of Europe.

CAFRE would like to express our appreciation to all the Dairy-4-Future pilot farmers for their continued cooperation and support with the project.