Lyons Systems Research Herd Notes

Background: It is widely recognised that grass-based systems offer a competitive advantage and will predominate in Ireland. However, grazing systems that have been developed to utilise large quantities of grazed grass have in the main been based on low output per cow. In this scenario, high levels of profitability are possible through avid cost control and comparatively high stocking rates for grazing systems. There are now reasons to consider the development of grazing systems that are based on high-output per cow. These reasons include (i) concerns about increasing dairy cow numbers and environmental emissions, (ii) facilitating farm expansion post EU-milk quota removal for land limited and fragmented farms, (iii) lack of available skilled labour on farms to deal with expanding animal numbers. The rationale for this research is that a high output grass-based spring milk production system can be profitable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in a sustainable Irish dairy industry.
For more details on the High Output Systems Research Herd visit
https://www.ucd.ie/agfood/about/lyonsresearchfarm/lyonsdairyherd/

Lyons Systems Research Herd Notes Week 29/07/2019

Farm Details:
Area available: 15.42 ha (2.17 ha reseeding)
Current Stocking Rate (MP): 3.76 LU/ha
Farm Cover: 424 kg DM/ha
Cover/LU: 113 kg/LU
Growth Rate: 58 kg DM/ha/day
Demand: 34 kg DM/ha/day
Average Concentrate Supplement: 3.6 kg/hd/day
Average DIM: 160 days
Milking cows: 58

Current Daily Feed Budget: Cows are being allocated 9 kg DM of grass, 9 kg DM grass silage (34 kg fresh weight) and an average of 3.6 kg of a high energy concentrate. From the beginning of the second rotation which began on the 2nd April, until the start of the last rotation, half of the group will be fed an 18% crude protein concentrate while the other half will be fed a 14% concentrate. Estimated grass intakes last week were 16.8 kg DM/hd/day.

Grassland: The current AFC is 424 kg DM/ha (range 51 to 1212 kg DM/ha). Average daily growth rate was 58 kg DM/ha this week and grass DM was 14.8 % on average. Due to the dry conditions, grass growth has not picked up to meet demand. Starting 29th July, baled silage is being buffer fed to ration grass supply on the farm, resulting in current grass demand of 34 kg. Cows will graze grass by day and be offered baled silage in a night paddock which will be fed after the evening milking. Another farm walk will be carried out Thursday.

Milk Production: Average production is currently 24.68 kg/cow at 4.41% fat and 3.70% protein (2.00 kg MS). SCC is 65,000. Fat, protein and SCC figures are based on milk recording results from the 24th of July. Four cows SCC ranged from 1.4 m to 3.5 m last week and were checked using CMT (California Milk Test). One cow is being treated based on veterinarian advice with a course of antibiotics. Milk production from this time last year was 21.70 kg/cow at 4.56% fat and 3.63% protein (1.85 kg MS).

The most recent (July) genetic evaluation of the herd is as follows:

EBI €	Milk S.I	Fert S.I	Calv €	Beef €	Maint €	Mmgt €	Hlth €	Milk kg	F kg	P kg	F%	P%	Calv Int	Surv %
176	66	63	42	-9	6	4	5	131	12	8.9	0.11	0.07	-2.9	2.1

The overall herd EBI is within the top 1% national. Milk SI is in the top 1% and herd fertility SI is in the top 15%.