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 22/07/2019

Farm Details:
Area available: 15.42 ha (2.17 ha reseeding)
Current Stocking Rate (MP): 3.76 LU/ha
Farm Cover: 559 kg DM/ha
Cover/LU: 149 kg/LU
Growth Rate: 75 kg DM/ha/day
Demand: 60 kg DM/ha/day
Average Concentrate Supplement: 3.7 kg/hd/day
Average DIM: 153 days
Milking cows: 58

Current Daily Feed Budget: Cows are being allocated 18 kg DM of grass and an average of 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 15.8 kg DM/hd/day.

Grassland: The current AFC is 559 kg DM/ha (range 50 to 1100 kg DM/ha). Average daily growth rate was 75 kg DM/ha this week and grass DM was 17.2 % on average. Due to the rainfall of 22 mm over the weekend grass growth should now pick up and soil moisture deficit (SMD) is now improving from 56 mm last week (14th July) to 36 mm on the 21st July. Further rainfall is forecast for later this week so grass growth should improve to meet, if not surpass, demand by the weekend.

Milk Production: Average production is currently 25.60 kg/cow at 4.16% fat and 3.67% protein (2.00 kg MS). SCC is 218,000. Fat, protein and SCC figures are based on milk recording results from the 17th of July. Four cows SCC ranged from 1.4 m to 3.5 m and they will be checked using CMT (California Milk Test) and treated based on veterinarian advice. Milk production from this time last year was 23.40 kg/cow at 4.17% fat and 3.55% protein (1.85 kg MS).

Breeding Season 2019: The breeding season started on Monday 29th of April for 11 weeks, finishing on the 15th July. Pregnancy scans are done weekly at approximately 30- and 60-days post A.I. Submission rate in the first 3 weeks was 95% (53/56 cows) with all cows being submitted by week 4. Current scanning data indicates that conception rate to first service is 64% (36/56). Based on a 60-day scan, 39/56 cows have been confirmed in calf from the first 24 days of breeding. Further scans will be completed over the coming weeks.