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 05/08/2019

Farm Details:
Area available: 17.52 ha
Current Stocking Rate (MP): 3.31 LU/ha
Farm Cover: 591 kg DM/ha
Cover/LU: 179 kg/LU
Growth Rate: 54 kg DM/ha/day
Demand: 30 kg DM/ha/day
Average Concentrate Supplement: 3.4 kg/hd/day
Average DIM: 167 days
Milking cows: 58

Current Daily Feed Budget: Cows are being allocated 9 kg DM of grass, 11 kg DM grass silage (DM 30%; 34 kg fresh weight) and an average of 3.4 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 7.8 kg DM/hd/day.

Grassland: The current AFC is 591 kg DM/ha (range 50 to 890 kg DM/ha). Average daily growth rate was 54 kg DM/ha this week and grass DM was 18.6% on average. Due to the dry conditions, grass growth has not picked up to meet demand. From the 29th July, baled silage is being buffer fed to ration grass supply on the farm, resulting in current grass demand of 30 kg. This will continue until pre-grazing covers reach approx. 1400 kg DM/ha. On the 6th August 27.6 kg of N was spread per ha. Total fertiliser application for the year, to date, is 230 kg of N per ha.

Milk Production: Average production is currently 23.82 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. Milk production from this time last year was 20.70 kg/cow at 4.56% fat and 3.63% 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. Current scanning data indicates that conception rate to first service is 64% (36/56). Based on a 60-day scan, 44/56 cows have been confirmed in calf from the first 42 days of breeding (79% in-calf in the first six weeks). So far two cows were scanned empty.