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 http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/.

Lyons Systems Research Herd Notes Week 07-08-2018

Farm Details:
Area available: 16.09 ha (1.56 removed for reseeding)
Current Stocking Rate (MP): 3.73 cows/ha
Farm Cover: 580 kg DM
Growth Rate: 18 kg DM/ha/day
Demand: 19 kg DM/ha/day
Average Concentrate Supplement: 5 kg/head/day in parlour and 6 kg/head/day in the partial TMR
Average DIM: 171.5
Cows Milking: 60

Daily Feed Budget: From tomorrow (8th of August) cows will be allocated 5 kg DM of grass and will be offered a partial TMR consisting of 26 kg fresh weight of maize silage (8.3 kg DM), 4 kg of beet pulp (3.52 kg DM), 2 kg of soya bean meal (1.72 kg DM) and 5 kg of a 14% protein in-parlour concentrate.

Grazing Plan: AFC on the 7th of August was 580 kg DM/ha (range 100 to 964 kg DM/ha) with a cover/LU of 155 kg DM. Average grass growth was 18 kg DM/ha/day last week. There is still a soil moisture deficit of approximately 75 mm in the region, with only 7.2 mm of rain on the farm in the last week. For the last four weeks, cows have been in a sacrifice paddock and have been fed a maize silage-based partial TMR, with no grass in the diet. Now that AFC has recovered, from tomorrow, the cows will start grazing during the day and will be allocated 5 kg DM of grass. There is a lot of stem in paddocks and grazing as well as moisture is required to stimulate growth and recovery further.

Milk Production: Average production this week is 20.7 kg/cow/day, as of the week ending the 6th of August, at 4.56% fat and 3.63% protein (1.70 kg MS). Average production this time last year was 25.2 kg/cow/day, at 4.39% fat and 3.52% protein (2.05 kg MS). SCC is currently 138,000. Fat, protein and SCC figures are based on milk recording results from the 16th of July.

Breeding Season 2018: The breeding season started on Monday 30th of April and ended on the 22nd of July. Pregnancy scans are being done weekly at approximately 30 and 60 days post A.I. Submission rate in the first 3 weeks was 96% (54/56 cows) with all cows being submitted by week 5. Current scanning data indicates that conception rate to first service is

68% (38/56). Based on a 60-day scan, 42 cows have been confirmed in calf from the first 30 days of breeding. Further scans will be completed over the coming weeks.