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 20-08-2018

Farm Details:
Area available: 17.65 ha
Current Stocking Rate (MP): 3.4 cows/ha
Farm Cover: 673 kg DM
Growth Rate: 111 (86) kg DM/ha/day
Demand: 48 kg DM/ha/day
Average Concentrate Supplement: 5 kg/head/day
Average DIM: 185.5
Cows Milking: 60

Photo © Zoe McKay

Daily Feed Budget: Cows are being allocated 14 kg DM of grass and 5 kg of a 18% protein in-parlour concentrate.

Grazing Plan: AFC on the 20th of August was 673 kg DM/ha (range 100 to 1650 kg DM/ha) with a cover/LU of 198 kg DM. Average grass growth was 111 kg DM/ha/day since last Thursday. There was 19.8 mm of rainfall on the farm last week and the soil moisture deficit for the region has reduced to approximately 68 mm. Cows have resumed grazing full-time and are being allocated 14 kg DM of grass and buffer feeding has ceased. Two paddocks (2.21 ha) have been removed for silage to be cut later this week with an average pre-cutting cover of 1700 kg DM/ha. The farm will be walked again on Thursday and depending on growth, a third paddock may be removed for silage (1650 kg DM/ha).

Milk Production: Average production this week has increased to 22.7 kg/cow/day, as of the week ending the 19th of August, at 4.71% fat and 3.67% protein (1.91 kg MS). Average production this time last year was similar at 22.6 kg/cow/day, at 4.39% fat and 3.52% protein (1.90 kg MS). SCC is currently 90,000. Fat, protein and SCC figures are based on milk recording results from the 1st of August.

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. Pre-breeding, the decision was made not to breed 5/60 for various reasons including lameness, temperament and high SCC, therefore, only 55/60 cows were submitted for breeding. Submission rate in the first 3 weeks was 96% (53/55 cows) with all cows being submitted by week 5. Current scanning data indicates that conception rate to first service is 69% (38/55). Based on a 60-day scan, the 6 week in calf rate is 84% (46/55 cows). To date,

52/55 cows have been confirmed in calf from the first 9 weeks of breeding. Further scans will be completed over the coming weeks.

BCS: BCS of the herd was assessed last Tuesday (14th of August). Average BCS was 3.02. Of the herd, 5% (3/60) have a BCS of ≤ 2.5 and 10% (6/60) have a BCS ≥ 3.5.