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 30-07-2018

Farm Details:
Area available: 16.09 ha (1.56 removed for reseeding)
Current Stocking Rate (MP): 3.73 cows/ha
Farm Cover: 487 kg DM
Growth Rate: 7 kg DM/ha/day
Demand: 0 kg DM/ha/day
Average Concentrate Supplement: 5 kg/head/day in parlour and 4.4 kg/head/day in the partial TMR
Average DIM: 164.5
Cows Milking: 60

Image © Zoe McKay

Daily Feed Budget: Due to the continuing drought conditions cows are being allocated 0 kg DM of grass, 10.4 kg fresh weight of baled grass silage (3.3 kg DM), 32.4 kg fresh weight of maize silage (10.3 kg DM), 2.1 kg of beet pulp (1.9 kg DM), 2.1 kg of soya bean meal (1.93 kg DM), 0.51 kg of alfalfa and 5 kg of in-parlour concentrate.

Grazing Plan: AFC on the 30th of July was 487 kg DM/ha (range 100 to 855 kg DM/ha) with a cover/LU of 131 kg DM. Average grass growth was 7 kg DM/ha/day last week. There is a soil moisture deficit of approximately 78 mm in the region, with 27 mm of rain on the farm in the last week. For the last three weeks, cows are in a sacrifice paddock and are being fed a maize silage-based partial TMR, with no grass in the diet. This diet has been fed along the fence in the sacrifice paddock since the 6th of July and will be used until grass growth improves. Grazing will resume when AFC is above 500 kg DM/ha which may be achieved by the end of this week.

Milk Production: Average production this week is 21.7 kg/cow/day, as of the week ending the 22th of July, at 4.56% fat and 3.63% protein (1.77 kg MS). Average production this time last year was 27 kg/cow/day, at 4.32% fat and 3.52% protein (2.1 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.

BCS: BCS of the herd was assessed last Tuesday (24th of July). Average BCS was 2.96. Of the herd, 11.66% (7/60) have a BCS of ≤ 2.5 and 6.6% (4/60) have a BCS ≥ 3.5.