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 25-06-2018

Farm Details:
Area available: 16.09 (1.56 removed for reseeding)
Current Stocking Rate (MP): 3.73
Farm Cover/LU: 131 kg DM/LU
Growth Rate: 36 kg DM/ha/day
Demand: 35 kg DM/ha/day
Average Concentrate Supplement: 4.25 kg/head/day
Average DIM: 129.5
Cows Milking: 60

Daily Feed Budget: Cows are being allocated 9.5 kg DM of grass, 5.5 kg DM of silage and 3.5 or 6 kg of concentrate depending on DIM (cows > 120 DIM on 3.5 kg, cows < 120 DIM on 6 kg).

Grazing Plan: AFC on the 25th of June was 487 kg DM/ha (range 118 to 1248 kg DM/ha) with a cover/LU of 131 kg DM. Average grass growth was 36 kg DM/ha/day. Demand has dropped (35 kg DM/ha/day) because silage is being buffer fed from today to ration grass supply on the farm. Silage (bales that were made from MP on the 30th of April) is being fed for an hour before and after the evening milking for the next 7 days. Another farm cover will be conducted on Thursday to reassess. Average DM of the grass this week was 20.4% and quality remains visibly poor.

BCS: BCS of the herd was assessed last Tuesday (19th of June). Average BCS was 2.98. Of the herd, 5% (3/60) have a BCS of ≤ 2.5 and 6.6% (4/60) have a BCS ≥ 3.5.

Milk Production: Average production this week is currently 25.5 kg/cow as of the week ending the 25th of June, at 3.84% fat and 3.31% protein (1.82 kg MS). Average production this time last year was 29.4 kg/cow, at 4.20% fat and 3.52% protein (2.3 kg MS). SCC is currently 285,000. SCC has increased due to one cow having an SCC of 9.9 million, this cow has been treated with a course of prescribed antibiotics. This cow's SCC increased the herd average by 58% and without that cow the herd average SCC is 120,000. Fat, protein and SCC figures are based on milk recording results from the 6th of June.

Breeding Season 2018: The breeding season started on Monday 30th of April and are now in week 9 of 12 weeks. Breeding is all by A.I. and is being done twice daily. Bulls being used are as follows: HZB, LWR, FR2031, FR2236, FR2297, FR2298, FR2314, FR2371, FR2460,

FR4020, FR4244. Heat detection is being done using Moo Monitors with a scratch card and crayon system used to replace visual heat detection. To date, after 56 days of breeding, 100% (56/56) of the cows have been served.