



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 11-06-2018

Farm Details:

Area available: 16.09 (1.56 removed for reseeded)
Current Stocking Rate (MP): 3.73
Farm Cover/LU: 187 kg DM/LU
Growth Rate: 42 kg DM/ha/day
Demand: 67 kg DM/ha/day
Average Concentrate Supplement: 6 kg/head/day
Average DIM: 115.5
Cows Calved: 60



Daily Feed Budget: Cows are being allocated 18 kg DM of grass and an average of 6 kg of a high energy concentrate.

Grazing Plan: AFC on the 11th of June was 698 kg DM/ha (range 100 to 2013 kg DM/ha) with a cover/LU of 187 kg DM. Average grass growth was 42 kg DM/ha/day which is below demand (67 kg DM/ha) due to the dry weather. Currently cows are grazing a cover of 1890 kg DM/ha. This paddock was earmarked for removal as surplus bales, however, due to poor growth, this paddock had to be grazed and will be topped after as there is quite a bit of stem. Another farm cover will be conducted on Thursday to reassess growth with rain forecasted for Wednesday. Average DM of the grass this week was 21.53%.

Milk Production: Average weekly production is currently 27.2 kg/cow as of the end of the 10th of June at 3.84% fat and 3.31% protein (1.93 kg MS). Average production this time last year was 31.0 kg/cow at 4.12% fat and 3.42% protein (2.3 kg MS). SCC is currently 285,000. 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 will continue for 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 42 days of breeding, 100% (56/56) of the cows have been served.



Lyons Systems Research Herd Notes

Breeding results to date:

	% of cows submitted
Week 1	36% (20/56)
Week 2	66% (36/56)
Week 3	96% (54/56)
Week 4	98.2% (55/56)
Week 5	100% (56/56)