



Lyons Systems Research Herd Notes

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 08-05-2018

Farm Details:

Area available: 17.65
Current Stocking Rate (MP): 3.98
Farm Cover/LU: 198 kg DM/LU
Growth Rate: 105 kg DM/ha/day
Demand: 72 kg DM/ha/day
Average Concentrate Supplement: 6.4 kg/head/day
Average DIM: 80.5
Cows Calved: 60 (all calved)



Daily Feed Budget: Cows are being allocated 18 kg DM of grass and an average of 6.4 kg of a high energy concentrate (cows > 60 DIM on 6 kg, cows < 60 DIM on 8 kg).

Grazing Plan: Last week, average soil temperature was 10.7°C (100 mm below ground). AFC on the 8th of May was 787 kg DM/ha (range 122 to 1434 kg DM/ha). After measuring twice last week, two paddocks (2.58 ha with an average cover of 515 kg DM/ha) have been taken out for silage to be cut in the next week or two. These paddocks were chosen to be removed as they were not grazed to the desired residuals during their last grazing. Average grass growth was 105 kg DM/ha/day and cover/LU is 198 kg DM with paddocks removed. Average DM of the grass the cows were grazing this week was 18.9%.

Milk Production: Average weekly production is currently 30.9 kg/cow as of the end of the 7th of May at 4.25% fat and 3.5% protein (2.38 kg MS). SCC is 242,000. Fat, protein and SCC figures are based on milk recording results from the 25th of April. As SCC is increasing, milk samples will be taken for culture and sensitivity testing this week and cows may be treated accordingly. This week last year, average production was 34.3 kg/cow with 4.0% fat, 3.3% protein, 2.5 kg MS and an SCC of 53,000.

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 across the herd are as follows: HZB, LWR, FR2031, FR2236, FR2297, FR2298, FR2314, FR2371, FR2460, FR4020, FR4244. These bulls were selected based on high milk production and components while maintaining high fertility. Eleven bulls were selected to increase bull team reliability. Easy calving bulls (<2.4%) are being used for heifers. Heat detection is being done using Moo Monitors with a scratch card and crayon system used to replace visual heat



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detection. To date, after 7 days of breeding, 37.5% (21/56 of cows to be bred) of the cows have been bred.

BCS: Last Friday (4th of May) the herd was assessed for BCS, the average BCS is 2.94 with 10% (6/60) of the milking herd with a BCS of ≤ 2.5 and 5% (3/60) with a BCS ≥ 3.5 .