



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 16-11-2020

Farm Details: Area available: 17.43 ha
Current Stocking Rate (MP): 3.27
Farm Cover: 561kg DM/ha
Growth Rate: 17kg DM/ha/day
Demand: 0kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 274 days



Current Daily Feed Budget: Cows are being offered 3kg/day of concentrates. All cows are now being offered an 18% protein concentrate until dry-off. The herd is also being allocated 15kg DM of silage per day.

Grazing Plan: The AFC on 17th November was 561kg DM/ha (range: 100-1050kg DM/ha). As of 11nd November 16.41ha (94%) of the MP had been grazed. Cows were being housed indoors by night and allowed to graze by day since Thursday 29th October due to lower growth rates coupled with worsening weather and were housed full time on the 11th November. The decision to house cows prior to grazing 100% of the platform was based on a lower than desired AFC on the MP, poorer ground conditions leading to a potential increase in excessive poaching of paddocks and an opening cover of just 750 kg DM/ha on the last paddock for grazing. Reducing the demand for grass in the diet to zero will take advantage of November growth rates and allow the AFC build closer to a target of 700 kg DM/ha at the final measurement on the 1st of December.

Between 8th November - 15th November, the average soil temperature at 100mm was 9.3°C (range: 6°C-12.6°C) which has been consistent over a number of weeks. This has allowed growth rates to hold steady in the mid-high teens. 23.9mm of rain fell between 9th and 15th November (data from the nearby Met Eireann station, Casement Aerodrome). This level of rainfall is evident with paddocks visibly wetter under foot for grass walks.

Milk Production: The average milk production from 9th November - 15th November was 15.4 kg/cow at 5.48% milk fat, 4.02% protein, 1.42 kg MS and 92,720 SCC based on milk recording on 12th November. Average milk production this time last year was 14.3kg/cow at 4.98% fat, 3.59% protein (1.23 kg MS) and SCC at 71,000.

BCS: On 12th November, the BCS of the herd was assessed. The average BCS was 3.06 with 0 cows being ≤ 2.5 and 4 cows being ≥ 3.5 (7%). 93% of cows are on target BCS for this time of year.



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