



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 26/11/2018

Farm Details:

Area available: 17.65 ha
Farm Cover: 826 kg DM
Growth Rate: 17 kg DM/ha/day
Demand: 0 kg DM/ha/day
Average Concentrate Supplement: 3.3 kg/head/day
Average DIM: 281
Cows Milking: 50 (9 dried off)



Daily Feed Budget: Cows are being offered 16 kg DM silage and 3 or 4 kg of an 18% in-parlour concentrate depending on DIM (cows > 270 DIM on 3 kg, cows < 270 DIM on 4 kg).

Grazing Plan: The cows were housed full-time on the 5th of November, with an AFC of 510 kg DM/ha. This week average grass growth was 17 kg DM/ha/day and AFC on the 26th of November was 826 kg DM/ha. Average soil temperature (at 100mm) for the last week was 6.8°C.

Milk Production: Average production is 13.3 kg/cow/day, as of the week ending 18th of November, at 5.03% fat and 3.92% protein (1.17 kg MS). Average production this time last year was 14.0 kg/cow/day, at 4.98% fat and 3.95% protein (1.25 kg MS). SCC is currently 122,000. Fat, protein and SCC figures are based on milk recording results from the 7th of November.

Drying off: Over the last three weeks, cows with an average weekly yield of below 9 kg/day were dried off (9/59). When dried off, they are being fed 8.1 kg DM of first-cut silage (72 DMD) and 150 g of dry cow minerals.

BSC and weight of in-calf heifers: Last week, the BCS and weight of the in-calf heifers was recorded. The average weight was 527 kg and the average BCS was 3.58 which is close to the targets for this herd of 530 kg and BCS of 3.5 at calving. The heifers are still grazing and will be housed in mid-December (weather permitting). At housing, another BCS will be taken, all heifers with a BCS >3.5 will be housed separately and fed a restricted diet.