



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 12/11/2018

Farm Details:

Area available: 17.65 ha
Current Stocking Rate (MP): 3.34 cows/ha
Farm Cover: 571 kg DM
Growth Rate: 13 kg DM/ha/day
Demand: 0 kg DM/ha/day
Average Concentrate Supplement: 3.5 kg/head/day
Average DIM: 269.5
Cows Milking: 55 (4 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 last Tuesday, the 5th of November, with an AFC of 510 kg DM/ha. Since closing, average grass growth was 13 kg DM/ha/day and AFC on the 12th of November was 571 kg DM/ha. If the block grows ~10 kg DM/ha/day between now and Dec 1st, the AFC will be ~760 kg DM/ha which is on target for this stocking rate. Average soil temperature (at 100mm) for the last week was 7.3°C.

Milk Production: Average production is 14.5 kg/cow/day, as of the week ending 11th of November, at 5.12% fat and 4.14% protein (1.32 kg MS). Average production this time last year was similar at 14.5 kg/cow/day, at 4.98% fat and 3.95% protein (1.29 kg MS). SCC is currently 162,000. Fat, protein and SCC figures are based on milk recording results from the 24th of October.

Management at drying off: Last week, cows with an average weekly yield of below 9 kg/day were abruptly dried off (4/59). The protocol for drying off is as follows: cows are wiped with blue paper, teat dipped (with dual dip: Chlorhexidine and lactic acid) and milked as normal. After milking, the teats are wiped with the blue paper again and each individual teat is disinfected with alcohol wipes (rotating clockwise starting with front right and finishing with front left) before applying antibiotic tubes (Cepravin), followed by teat sealer (Osmond's Teat Seal). Teats are then sprayed with the dual dip product. After seeking veterinary advice, it was decided that all cows get antibiotics at drying off due to high SCC's in the herd. Cows are housed and being fed 8.1 kg DM of first cut silage (72 DMD) and 150g of dry cow minerals.



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BCS: BCS of the herd was assessed on Tuesday (13th of October). Average BCS was 3.01. Of the herd, 3.6% (2/55) have a BCS of ≤ 2.5 and 3.6% (2/59) have a BCS ≥ 3.5 .