



**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 10/12/2018

### Farm Details:

Area available: 17.65 ha  
Farm Cover: 865 kg DM  
Demand: 0 kg DM/ha/day  
Average Concentrate Supplement: 3.2 kg/head/day  
Average DIM: 295  
Cows Milking: 40 (19 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 final grass cover for 2018 was conducted on Monday the 3<sup>rd</sup> of December and closing AFC was 865 kg DM/ha. The total annual DM production to the 3<sup>rd</sup> December was 11.4 t DM/ha with a paddock range from 9.5 to 14.1 t DM/ha. There was an average of 6.5 grazings achieved. Last year, average total DM production was 14.0 t DM/ha with a range of 12.4 to 16.6 t DM/ha and there were 9.6 grazings achieved.

**Milk Production:** Average production is 14.3 kg/cow/day, as of the week ending 9<sup>th</sup> of December, at 5.18% fat and 4.03% protein (1.30 kg MS). Average production was similar this time last year at 13.0 kg/cow/day, at 4.68% fat and 3.77% protein (1.10 kg MS). SCC is currently 89,000. Fat, protein and SCC figures are based on milk recording results from the 28<sup>th</sup> of November.

**Drying off:** Over the last five weeks, cows with an average weekly yield of below 9 kg/day and cows at 60 days pre-calving were dried off (19/59). This week another 6 cows will be dried off. Cows are not restricted feeding prior to drying off. 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 (Ceptravin), 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 a recent SCC issue in the herd. After drying off, they are being fed 8.1 kg DM of second-cut silage (72 DMD) and 150 g of dry cow minerals.



Lyons Systems Research Herd Notes

**Winter break:** After this week, there will be no weekly notes until the spring time. After Christmas there will be a final report published on the UCD website with the results from the 3 years of the study.