



## 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 03/12/2018

#### Farm Details:

Area available: 17.65 ha  
Farm Cover: 865 kg DM  
Growth Rate: 6 kg DM/ha/day  
Demand: 0 kg DM/ha/day  
Average Concentrate Supplement: 3.3 kg/head/day  
Average DIM: 288  
Cows Milking: 49 (10 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 5<sup>th</sup> of November, with an AFC of 510 kg DM/ha. The final grass cover for 2018 was conducted today (Monday the 3<sup>rd</sup> of Dec). Average grass growth was 6 kg DM/ha/day and closing AFC was 865 kg DM/ha with covers ranging from 325-1691 kg DM/ha. On average total annual DM production was 11.4 t DM/ha with a range from 9.5 to 14.1 t DM/ha. Average soil temperature (at 100mm) for the last week was 7.2°C.

**Milk Production:** Average production is 14.4 kg/cow/day, as of the week ending 2<sup>nd</sup> of December, at 5.03% fat and 3.92% protein (1.24 kg MS). Average production was similar this time last year at 14.4 kg/cow/day, at 4.68% fat and 3.77% protein (1.22 kg MS). SCC is currently 122,000. Fat, protein and SCC figures are based on milk recording results from the 7<sup>th</sup> of November.

**Drying off:** Over the last four weeks, cows with an average weekly yield of below 9 kg/day and cows at 60 days pre-calving were dried off (10/59). This week another 9 cows will be dried off. After drying off, they are being fed 8.1 kg DM of first-cut silage (72 DMD) and 150 g of dry cow minerals.