



## 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 19-03-2018

#### Farm Details:

Area available: 17.65  
Current Stocking Rate (MP): 3.4  
Farm Cover: 772 kg DM/ha  
Growth Rate: 15 kg DM/ha/day  
Demand: 42.5 kg DM/ha/day  
Average Supplement: 7.9 kg/head/day  
Average DIM: 40 days  
Cows Calved: 53 (out of 60)



Image © Zoe McKay

**Current Daily Feed Budget:** AFC on the 20<sup>th</sup> of March was 772kg DM/ha (range 104 to 1972kg DM/ha). Cows have been allocated 12.5kg DM of grass and 3kg DM (31% DM; 81% DMD; 0.92 UFL) of 1<sup>st</sup> cut silage before the evening milking. Cows are being fed 8 kg of a high energy concentrate. Once calved, they start on 4 kg/day and are built up to 8 kg over 7 days.

**Spring Grazing Plan:** Cows were in full time on Sunday and Monday due to snow. As of Tuesday, 20<sup>th</sup> of March cows will be out full time. So far, we have 32% (5.77 Ha) of the milking platform grazed. We are aiming to graze 75% (13.24Ha) by the 1<sup>st</sup> of April, but will not let AFC drop below 500kg DM/ha. We plan on spreading 57.5kg N/ha (one bag/acre) on Wednesday this week, bringing the total out to 85 kg N/ha (69 units/a).

**Milk Production:** Average weekly production is currently 26.70kg/cow as of the end of the 18<sup>th</sup> of March at 4.71% fat and 3.29% protein (2.14kg MS). SCC is 78,000. Fat, protein and SCC figures are based on milk recording results from the 21<sup>st</sup> of February.

**Soil Fertility Results:** The results from this year's soil samples showed that 12% of the milking platform was in a range of 6-6.49 for pH, with the remaining 78% greater than 6.5. As for phosphorus 60% (10.63Ha) of the platform is  $\geq$  index 3. The remaining 40% (7.02 Ha) is in index 2. Potassium results show that 66% (11.64Ha) of the platform was in either index 1 or 2, while the remaining 34% (6.01Ha) was in index 3.