



## 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 16-04-2018

#### Farm Details:

Area available: 17.65  
Current Stocking Rate (MP): 3.4  
Farm Cover: 891 kg DM/ha  
Growth Rate: 45 kg DM/ha/day  
Demand: 49 kg DM/ha/day  
Average Concentrate Supplement: 8 kg/head/day  
Average DIM: 63  
Cows Calved: 60 (all calved)



Image © Zoe McKay

**Current Daily Feed Budget:** AFC on the 16<sup>th</sup> of April was 891 kg DM/ha (range 142 to 1536 kg DM/ha). As of last Saturday (14<sup>th</sup> of April), the silage was removed from the diet. Cows are now being allocated 14.5 kg DM of grass and 8 kg of a high energy concentrate. Cows over 60 DIM are still on 8 kg of concentrate rather than the 6 kg originally planned in the feed budget but will be reduced back to 6 kg on Wednesday (18<sup>th</sup> of April).

**Spring Grazing Plan:** Last week, the average soil temperature (at 100 mm deep) was 9.04°C. Average grass growth was 45 kg DM/ha which increased cover/LU to 262 kg DM. Currently, average growth is only marginally lower than demand, therefore it is expected that “Magic Day” will occur later this week. At present, the covers on the first paddocks grazed in February are between 1109 and 1536 kg DM/ha. To date, 88.5% of the milking platform is grazed and the aim is to start the 2<sup>nd</sup> rotation on Wednesday (18<sup>th</sup> of April).

**Milk Production:** Average weekly production is currently 29.34 kg/cow as of the end of the 15<sup>th</sup> of April at 4.66% fat and 3.28% protein (2.33 kg MS). SCC is 78,000. Fat, protein and SCC figures are based on milk recording results from the 14<sup>th</sup> of March.

**Calving Season 2018:** The last cow in the herd calved on the 12<sup>th</sup> of April, therefore, the calving lasted 11 weeks and 6 days. Expected calving start date was the 31<sup>st</sup> of January however, the 1<sup>st</sup> cow calved on the 19<sup>th</sup> of January. In total, 30% (18/60) of the herd calved in January, 41.66% (25/60) calved in February, 23.33% (14/60) calved in March and 5% (3/60) calved in April. The mean calving date was 6<sup>th</sup> of February and 85% (51/60) of the herd calved within 6 weeks from the expected calving start date (31<sup>st</sup> January to the 14<sup>th</sup> of March).