



## 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 <https://www.ucd.ie/agfood/about/lyonsresearchfarm/lyonsdairyherd/>

### Lyons Systems Research Herd Notes Week 09/09/2019

#### Farm Details:

Area available: 17.53 ha  
Current Stocking Rate (MP): 3.31 LU/ha  
Farm Cover: 838 kg DM/ha  
Cover/LU: 253 kg/LU  
Growth Rate: 83 kg DM/ha/day  
Demand: 50 kg DM/ha/day  
Average Concentrate Supplement: 3.1 kg/hd/day  
Average DIM: 203 days  
Milking cows: 58



**Current Daily Feed Budget:** Cows are being allocated 15 kg DM of grass and an average of 3.1 kg of a high energy concentrate. From the beginning of the second rotation (2<sup>nd</sup> April) until the start of the last rotation, half of the group are being fed an 18% crude protein concentrate while the other half are on a 14% concentrate. Estimated grass intakes last week were 15.8 kg DM/hd/day (last week's actual allocation was ~17 kg DM of grass due to grazing high covers in two paddocks).

**Grassland:** The current AFC is 838 kg DM/ha (range 79 to 1572 kg DM/ha). Average daily growth rate was 83 kg DM/ha this week and grass DM was 16% on average. Our current AFC is behind our target for this time of year (~1000 kg DM/ha). However, with soil temperatures between 12 and 14 degrees and weather forecast for the next week warm and settled, growth rate should reach well above our current demand of 50 kg DM/ha/day. By the 1<sup>st</sup> of October we expect to have an AFC of approx. 1100 – 1200 kg DM/ha if average growth rate from now until the end of the month is 65 kg DM/ha/day. In order to lengthen our current rotation (9<sup>th</sup> rotation), cows will be offered 12-hour grass allocations. The current rotation length is 30 days and we will increase this to 35 days from mid-September.

**Milk Production:** Average production is currently 20.63 kg/cow at 4.26% fat and 3.70% protein (1.64 kg MS). SCC is 122,000. Fat, protein and SCC figures are based on milk recording results from the 3<sup>rd</sup> of September. Milk production from this time last year was 20.8 kg/cow at 4.39% fat and 3.70% protein (1.67 kg MS).

**BCS:** Body condition scoring was carried out on 12th September. Average BCS was 2.86 and there were 5 cows out of 58 thin ( $\leq 2.5$ ; 8.6% of herd). No cows were fat, i.e.  $\geq 3.5$  BCS.