



## 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 24-09-2018

#### Farm Details:

Area available: 17.65 ha  
Current Stocking Rate (MP): 3.34 cows/ha  
Farm Cover: 852 kg DM  
Growth Rate: 34 (31) kg DM/ha/day  
Demand: 30 kg DM/ha/day  
Average Concentrate Supplement: 4 kg/head/day  
Average DIM: 220.5  
Cows Milking: 59



**Daily Feed Budget:** Cows are being allocated 9 kg DM of grass, 4 kg of concentrate of an 18% in-parlour concentrate and 5 kg DM of silage before evening milking.

**Grazing Plan:** AFC on the 24<sup>th</sup> of September was 852 kg DM/ha (range 150 to 1650 kg DM/ha) with a cover/LU of 255 kg DM. Baled silage has been introduced to slow down the rotation as the AFC reduced this week. Average grass growth was 34 kg DM/ha/day since last Friday. Average grass DM last week was 18.2%.

**Milk Production:** Average production is 18.4 kg/cow/day, as of the week ending 23<sup>rd</sup> of September, at 4.39% fat and 3.70% protein (1.49 kg MS). Average production this time last year was 19.5 kg/cow/day, at 5.07% fat and 3.93% protein (1.75 kg MS). SCC is currently 168,000. Fat, protein and SCC figures are based on milk recording results from the 12<sup>th</sup> of September.

**Breeding Season 2018:** The breeding season started on Monday 30<sup>th</sup> of April and ended on the 22<sup>nd</sup> of July. Pregnancy scans are being done weekly, at approximately 30 and 60 days post A.I. Pre-breeding, the decision was made not to breed 5/60 for various reasons, including lameness, temperament and high SCC, therefore, only 55/60 cows were submitted for breeding. Submission rate in the first 3 weeks was 96% (53/55 cows) with all cows being submitted by week 5. Current scanning data indicates that conception rate to first service is 69% (38/55). Based on a 60-day scan, the 6 week in calf rate is 84% (46/55 cows). To date, 52/55 cows have been confirmed in calf from the first 9 weeks of breeding. The final scan will take place next week.