



## 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 30-04-2018

#### Farm Details:

Area available: 17.65  
Current Stocking Rate (MP): 3.4  
Farm Cover/LU: 164 kg DM/LU  
Growth Rate: 52 kg DM/ha/day  
Demand: 61 kg DM/ha/day  
Average Concentrate Supplement: 7 kg/head/day  
Average DIM: 73.5  
Cows Calved: 60 (all calved)



**Current Daily Feed Budget:** Cows are being allocated 18 kg DM of grass and an average of 7 kg of a high energy concentrate (cows > 60 DIM on 6 kg, cows < 60 DIM on 8 kg).

**Grazing Plan:** Last week, average soil temperature was 10.9°C (100 mm below ground). AFC on the 30<sup>th</sup> of April was 556 kg DM/ha (range 252 to 1427 kg DM/ha). After measuring twice last week, four paddocks (3.86 ha with an average cover of 2244 kg DM/ha) were taken out for silage to be cut today (30<sup>th</sup> of April). Average grass growth was 52 kg DM/ha/day and cover/LU is 164 kg DM with paddocks removed. The five-year average growth rate for May is approximately 80 kg DM/ha/day on the farm so while the growth rate is below demand this week, it is expected to increase as May approaches.

**Milk Production:** Average weekly production is currently 30.9 kg/cow as of the end of the 29<sup>th</sup> of April at 3.96% fat and 3.4% protein (2.29 kg MS). This time last year, average daily production was at 34.4 kg/cow at 4% fat and 3.3% protein (2.5 kg of MS). SCC is 169,000. Fat, protein and SCC figures are based on milk recording results from the 18<sup>th</sup> of April.

**Breeding Season 2018:** The breeding season started on Monday 30<sup>th</sup> of April and will continue for 12 weeks. Breeding is all by A.I. and is being done twice daily. Bulls being used across the herd are as follows: HZB, LWR, FR2031, FR2236, FR2297, FR2298, FR2314, FR2371, FR2460, FR4020, FR4244. These bulls were selected based on high milk production and components while maintaining high fertility. Eleven bulls were selected to increase bull team reliability. Easy calving bulls (<2.4%) are being used for heifers. Heat detection is being done using Moo Monitors with a scratch card and crayon system used to replace visual heat detection.



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**Pre-breeding scanning:** Pre-breeding scans took place on Wednesday the 28<sup>th</sup> of March and the 25<sup>th</sup> of April to check cows for endometritis (“whites”), cyclicity and cystic ovarian disease. 5/60 of the cows have been treated for endometritis with a combination of prostaglandin and metricure. 2/60 cows are being treated for non-cycling (commencing Monday 30<sup>th</sup> of April) with 8 day CIDR program.