



## 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 18-06-2018

#### Farm Details:

Area available: 16.09 (1.56 removed for reseeded)  
Current Stocking Rate (MP): 3.73  
Farm Cover/LU: 161 kg DM/LU  
Growth Rate: 58 kg DM/ha/day  
Demand: 60 kg DM/ha/day  
Average Concentrate Supplement: 4.4 kg/head/day  
Average DIM: 122.5  
Cows Calved: 60

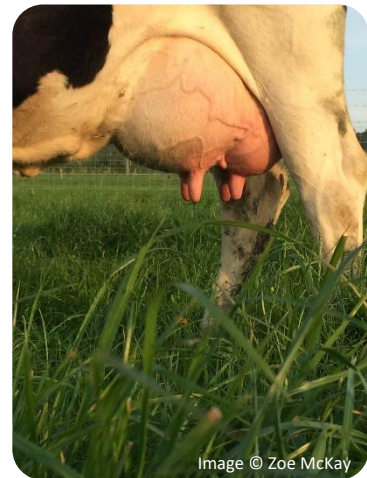
**Daily Feed Budget:** Cows are being allocated 16 kg DM of grass and 3.5 or 6 kg of concentrate depending on DIM (cows > 120 DIM on 3.5 kg, cows < 120 DIM on 6 kg).

**Grazing Plan:** AFC on the 18<sup>th</sup> of June was 602 kg DM/ha (range 100 to 1318 kg DM/ha) with a cover/LU of 161 kg DM. Average grass growth was 58 kg DM/ha/day which is slightly below demand (60 kg DM/ha) due to the dry weather. Another farm cover will be conducted on Thursday to reassess growth with rain forecasted for Wednesday. Average DM of the grass this week was 21.2% and quality is visibly poor.

**Fertiliser:** Last week, 31.2 kg N/ha in the form of 26:0:0:5 (Sulfa CAN) was spread on the MP. To date, the MP has received 175 kg N/ha, 8.9 kg P/ha and 17.8 kg K/ha.

**Milk Production:** Average weekly production is currently 26.6 kg/cow as of the week ending the 17<sup>th</sup> of June, at 3.84% fat and 3.31% protein (1.89 kg MS). Average production this time last year was 31.0 kg/cow at 4.10% fat and 3.39% protein (2.3 kg MS). SCC is currently 285,000. The SCC has increased due to one cow having an SCC of 9.9 million, this cow has been treated with a course of prescribed antibiotics. This cow's SCC increased the herd average by 58% and without that cow the herd average SCC is 120,000. Fat, protein and SCC figures are based on milk recording results from the 6<sup>th</sup> of June.

**Locomotion score:** Locomotion score assessment was carried out last week. Currently, 11.6% (7/60) of the cows are lame which is slightly above the target of 10%. Lame cows will be treated by the hoof-trimmer.





**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 are as follows: HZB, LWR, FR2031, FR2236, FR2297, FR2298, FR2314, FR2371, FR2460, FR4020, FR4244. Heat detection is being done using Moo Monitors with a scratch card and crayon system used to replace visual heat detection. To date, after 49 days of breeding, 100% (56/56) of the cows have been served.

**Breeding results to date:**

	<b>% of cows submitted</b>
<b>Week 1</b>	36% (20/56)
<b>Week 2</b>	66% (36/56)
<b>Week 3</b>	96% (54/56)
<b>Week 4</b>	98% (55/56)
<b>Week 5</b>	100% (56/56)