



## 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) 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 and sustainable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in the 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 7-11-2022

#### Farm Details:

Area available: 17.43ha  
Current Stocking Rate (MP): 3.27 LU/ha  
Farm Cover: 621kg DM/ha  
Cover/LU: 190kg DM/LU  
Growth Rate: 28 kg DM/ha/day  
Demand: 23kg DM/ha/day  
Average Concentrate Supplement: 2kg/head/day  
Average DIM: 283 days



**Current Daily Feed Budget:** Cows are currently being fed 2 kg of concentrate in the parlour. As part of our nutrition trial, half of the herd are being offered an 18% protein commercial concentrate, whilst a 14% crude protein concentrate (formulated with native ingredients) will continue to be offered to the remainder; with both regimes continuing until dry-off. Cows are also allocated 7kg DM of silage, 7kg DM of grass and grass DM is currently 13.3%. The herd have been housed at night since the 2<sup>nd</sup> November.

**Grazing Plan:** The current AFC is 621kg DM/ha (range 100 – 1400kg DM/ha), whilst cover/LU is 190kg DM, and growth is 28 kg DM/ha/day. From 31<sup>st</sup> October to 6<sup>th</sup> November, the average soil temperature at 100mm was 9.3 °C, and 8.5 mm of rain fell (rain data from the nearby Casement Aerodrome). The final grazing rotation began on the 14<sup>th</sup> of October. The herd is grazing out the paddocks well. The rotation will finish on November 18<sup>th</sup>, with the herd being housed full time on this date.

**Milk Production:** Average production from 31<sup>st</sup> October to 6<sup>th</sup> November was 15.3 kg/cow at 4.73 % milk fat, 3.95 % protein, 1.52 kg MS and SCC was 62,000 . Milk production from this time last year was 16.6 kg/cow at 5.13 % milk fat, 4.00% protein, 1.33kg MS and SCC was 83,000.

**BCS:** 57 cows were body condition scored on the 8<sup>th</sup> of November, 4/57 scored 2.5 (7%), whilst 12/57 scored 2.75 (21.05%) and 1 cow scored 3.5 (2%) All other cows scored between 3 and 3.25 (69%)

**Breeding:** The final scan of the herd was carried out on 13<sup>th</sup> October. In total, 51/57 bred cows (89%) were scanned as pregnant. One cow has subsequently aborted the pregnancy post scanning. Therefore, our empty rate is 10.5% (6/57 cows).



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