



Lyons Systems Research Herd Notes

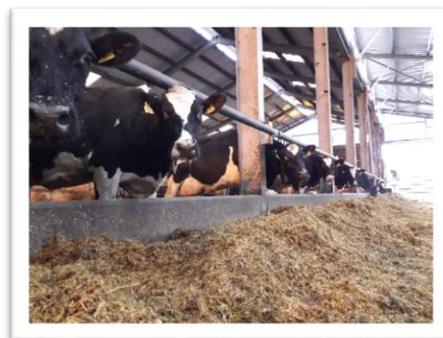
Background: It is widely recognised that grass-based systems offer a competitive advantage and will predominate in Ireland. However, grazing systems that have been developed to utilise large quantities of grazed grass have in the main been based on low output per cow. In this scenario, high levels of 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 04/11/2019

Farm Details:

Area available: 17.53 ha
Current Stocking Rate (MP): 3.25 LU/ha
Farm Cover: 445 kg DM/ha
Cover/LU: 0 kg/LU
Growth Rate: 15 kg DM/ha/day
Demand: 0 kg DM/ha/day
Average Concentrate Supplement: 3 kg/hd/day
Average DIM: 258 days
Milking cows: 57 (1 dried off)



Current Daily Feed Budget: Cows are being allocated 17 kg DM silage and 3 kg of a high energy concentrate. Since the 7th October all cows are being fed an 18% crude protein concentrate. Estimated grass intakes last week were 5.7 kg DM/hd/day.

Grassland: The current AFC is 445 kg DM/ha (range 31 to 931 kg DM/ha). Average daily growth rate was 15 kg DM/ha and grass DM was 15.1% on average. We began our last rotation on the 7th October. Cows were housed by night since the 20th October and were housed full time on Sunday 3rd November due to the extreme rainfall which occurred over the weekend and ground conditions are no longer fit for grazing. As of Sunday, 3rd November we had 87% of the farm (15.36 ha) grazed, with two paddocks remaining not grazed. The cover on these paddocks is averaging 800 kg DM/ha and will be carried over for grazing in spring.

Milk Production: Average production is currently 15.6 kg/cow at 4.50% fat and 3.87% protein (1.31 kg MS). SCC is 104,000. Fat, protein and SCC figures are based on milk recording results from the 23rd of October. Milk production from this time last year was 16.4 kg/cow at 5.12% fat and 4.14% protein (1.50 kg MS).



Silage test results: First cut silage was tested for quality and showed:

DM (%)	26.1
CP (% DM)	16.3
DMD (% DM)	78.0
ME (MJ/kg)	11.8
UFL	0.89
NDF (% DM)	48
FIM intake (g/kgW^{0.75})	113