



## Lyons Systems Research Herd Notes

**Background:** The main aim of the **Systems Research Herd** at UCD Lyons Farm is to evaluate the feasibility (including profitability) of a higher input/output grazing system within a limited land holding scenario. The focus is on maximising milk solids output from the existing land holding which involves high output from individual cows and high stocking rates on the MP. This will occur most efficiently through maximising the use of grazed grass/home grown forage in the system and the strategic use of supplementation thereafter. Such a system might facilitate the successful expansion of the farm business without the need to buy or rent extra land, to buy stock, to acquire extra labour or to provide extra cow facilities. For the study purpose, stocking rate and concentrate inputs are fixed. For more details on the Systems Research Herd visit <http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/>.

## Lyons Systems Research Herd Notes Week 05-06-17

### Farm Details:

Area available: 13.76 ha (3.89 ha closed for silage/reseeding)  
Current Stocking Rate (MP): 4.36  
Farm Cover: 847 kg DM/ha (194 kg DM/cow)  
Growth Rate: 92.2 kg DM/ha/day  
Demand: 78.5 kg DM/ha/day  
Supplement: Concentrate 5.5 kg/cow/day  
Average DIM: 104 (range 42-136)



### Grass Supply:

AFC on 6<sup>th</sup> of June was 847 kg DM/ha (range 300 to 1360 kg DM/ha). We will continue to measure twice a week to manage quality and allocations.

2 paddocks (1.95 ha) remain out for silage which will be baled whenever the weather settles. A further 2 paddocks were sown with an Abergain:Abermagic mixture on Friday last, June 2<sup>nd</sup>. We are targeting summer and autumn growth with this mixture. The paddocks were sprayed 10 days before sowing, grazed tightly with cows and disc harrowed before being sown.

### Feed Budget

13 cows are now being fed 3.5 kg of concentrate as they have reached 120 DIM, with 1 cow on 8 kg of concentrate and the remainder (46) on 6 kg. This step down coincides with the passing of the most important period of the breeding season. Grass allowance has been increased to 18 kg DM per day to try and challenge the cows to eat as much grass DM as possible. Grass DM last week was 16.5% on average.

### Fertiliser:

154kg/ha (125 units/acre) of Nitrogen has been spread on the MP to date. We plan to blanket spread the MP this week with a compound fertiliser.

### Milk Production:

Average production is currently 31.1 kg/cow for the week 29<sup>th</sup> of May – 4<sup>th</sup> of June, at 4.12% fat and 3.42% protein (2.3 kg MS). SCC is 81,000. Fat, protein and SCC figures are based on milk recording results from the 23<sup>rd</sup> of May.

### BCS:

The average BCS on 26<sup>th</sup> May was 2.9, with a range of 2.5 to 3.5. 92% of the herd was in the range 2.75 to 3.25.

### Breeding Season 2017:

Breeding started on April 24<sup>th</sup> and will continue for 12 weeks. By the end of the 6<sup>th</sup> week of breeding, 97% of eligible cows have been served.

### Once a Day Milking

13 cows (22% of the herd) were put on OAD milking due to low BCS in early April. They are now all BCS 2.75 or above, and are back on TAD this week. One cow got mastitis after 6 weeks on OAD, and was treated and immediately put back to TAD milking. A preliminary look at the figures after 9 weeks on OAD milking indicates that BCS increased from 2.42 to 2.88. Yield dropped from 36 kg (2.7 kg MS) to an average of 31 kg (2.2 kg MS), and SCC increased from 38,000 to 46,000 for these cows over the 9-week period.