



**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 18-04-17

### Farm Details:

MP Area: 17.65 ha (4.26 ha closed for 1<sup>st</sup> cut silage)  
Current Stocking Rate: 4.18 LU/ha  
Farm Cover: 734 kg/DM/ha (175 kg DM/cow)  
Growth rate: 44kg DM/ha per day  
Demand: 67kg DM/ha/day  
Supplement: Concentrate 6-8 kg/cow/day  
Average DIM: 53 (range 11-87)



Image © Stuart Kirwan

### Grass Supply

AFC on 18<sup>th</sup> April was 734kg DM/ha (range 200 to over 1400 kg DM/ha).

We are 10 days into the second rotation.

We are allocating 16kg DM of grass and 7kg of concentrate per day. We are aiming to graze out paddocks tightly (~4cm) in the second rotation, especially those that were not grazed well in the first.

Growth is back this week due to lower temperatures than we had in previous weeks.

### Grazing conditions

Grazing conditions are excellent at the moment. Grass that the cows grazed over the weekend was 18-19% DM.

Cows are cleaning out paddocks well now with target residuals of ~4cm being achieved.

### Supplements

Cows are being fed on average 7kg (between 6 and 8 kgs) of a high energy (0.94 UFL), medium protein (16%) concentrate. They start at 4 kg/d after calving and are built up to 8 kg over 7 days. Once they reach 60 DIM this is reduced to 6 kg/d.

### Fertiliser

Urea was applied at a rate of ½ bag per acre on the 19<sup>th</sup> of January.

Urea was also applied at a rate of 1 bag per acre on 15<sup>th</sup> of March.

We will be aiming to blanket spread the MP this week with either 20-2-12 for P index 2 paddocks or CAN on P index 3 & 4 paddocks.

### Milk Production

Average production is currently 34 litres per cow, 4.3% fat, 3.4% protein (2.6 kg MS). SCC is 52,000.

### Breeding Season 2017

Breeding will start on April 24<sup>th</sup> and will continue for 12 weeks. Breeding is all by A.I. and bulls to be used across the herd this year are as follows: FR2226, FR4020, FR2298, SEW, FR4019, FR4118. These bulls are selected largely for their suitability to maintaining the two distinct groups (Low vs High milk PTA) within the herd, along with improving overall herd EBI.