



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 study purpose, stocking rate and concentrate inputs are fixed. (For more details on Systems Research Herd visit <http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/>).

Lyons Systems Research Herd Notes Week 10-04-17

Farm Details:

MP Area: 17.65 ha (4.26 ha closed for 1st cut silage)
Current Stocking Rate: 4.18 LU/ha
Farm Cover: 893 kg/DM/Ha (213 kg DM/cow)
Growth rate: 52kg DM/ha per day
Demand: 67kg DM/ha/day
Supplement: Concentrate 7 kg/cow/day (6-8 kg/cow/day)
Average DIM: 47 (range 7-80)



Grass Supply

AFC on 10th April was 893kg DM/ha (range 100 to 1700 kg DM/ha). We began the second rotation on Saturday evening last (April 8th), grazing a cover of 1700kg DM/ha.

9% (~1.7ha) of the milking platform was skipped in the first round as covers had become too strong (in excess of 2500kg DM/ha). These strong covers were cut and baled over the weekend. This had not been planned but was necessary due to the strong winter growth along with difficult spring grazing conditions.

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.

Grazing conditions

Grazing conditions are excellent this week. Grass that the cows grazed over the weekend was 19% DM while conditions underfoot have firmed up noticeably.

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 a day 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 19th of January.

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

The next application will be a compound applied in mid-April, between the 13th and the 20th.

Milk Production

Average production is currently 36 litres per cow, 3.8% fat, 3.4% protein (2.6 kg MS).
SCC is 58,000.

Calving

Calving started on the 24th Jan. To date we have 95% of the herd calved and breeding will start on April 24th.