



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 17-10-2017

Farm Details:

Area available: 17.65
Current Stocking Rate (MP): 3.4
Farm Cover: 859 kg DM/ha (252 kg DM/cow)
Growth Rate: 51 kg DM/ha/day
Demand: 44.2 kg DM/ha/day
Supplement: Concentrate 3.2 kg/cow/day
Average DIM: 238 (range 176-269)



Image © Zoe McKay

Grass Supply: AFC on 17th of October was 859kg DM/ha (range 100 to 1894 kg DM/ha). Cows are cleaning out paddocks very well with PGSH of 3.5-4cm being achieved. Ground conditions are beginning to deteriorate here on the heavier parts of the milking platform but in the main very little damage is being done.

We began closing paddocks on the MP on the 8th October with a target to have 70% of the MP closed by 1st November. After the first week we have grazed 21% of the block, which is on target for the autumn rotation planner.

Feed Budget: Cows are being fed an average of 3.2 kg of concentrate. Half of the herd (30) are on 2.5kgs with the remainder on 4kg as they reached 240 DIM. Grass DMI last week was 13.1kg at 13.6% DM on average.

Cow Condition: Cows were body condition scored (BCS) on October 11th. The cows are in good condition with an average BCS of 2.95. Within the group there are 4 thin cows (BCS = 2.5) and 3 fat cows (BCS = 3.5).

Milk Production: Average production is currently 17 kg/cow at 4.6% fat and 4.0% protein (1.46 kg MS). SCC is 79,500. Fat, protein and SCC figures are based on milk recording results from the 4th October.

Breeding Season 2017: The final scan took place on the 4th of October. Despite a reasonably good start to the breeding season where conception rates for the first 3 weeks were just above 50% and the submission rate was 89%, the fertility results are disappointing. It is apparent from our initial checking that we have had weeks where conception rates completely crashed. We are hoping to investigate this fully. Two cows that were earlier scanned in calf have lost pregnancies.

Cows calved	60
Cows eligible for breeding	59
Submission rate (3 wk)	89%
6-week in calf rate	54%
Empty rate (13 wk)	15%



Herd EBI September 2017:

EBI	Milk	Fert	Calv	Beef	Maint	Health	Mgt
124	40.36	47.58	37.74	-8.89	5.19	0.77	1.25

Herd Lameness: The results of a herd locomotion score from Tuesday last, October 10th, showed 10% lameness (locomotion score 3 and above).