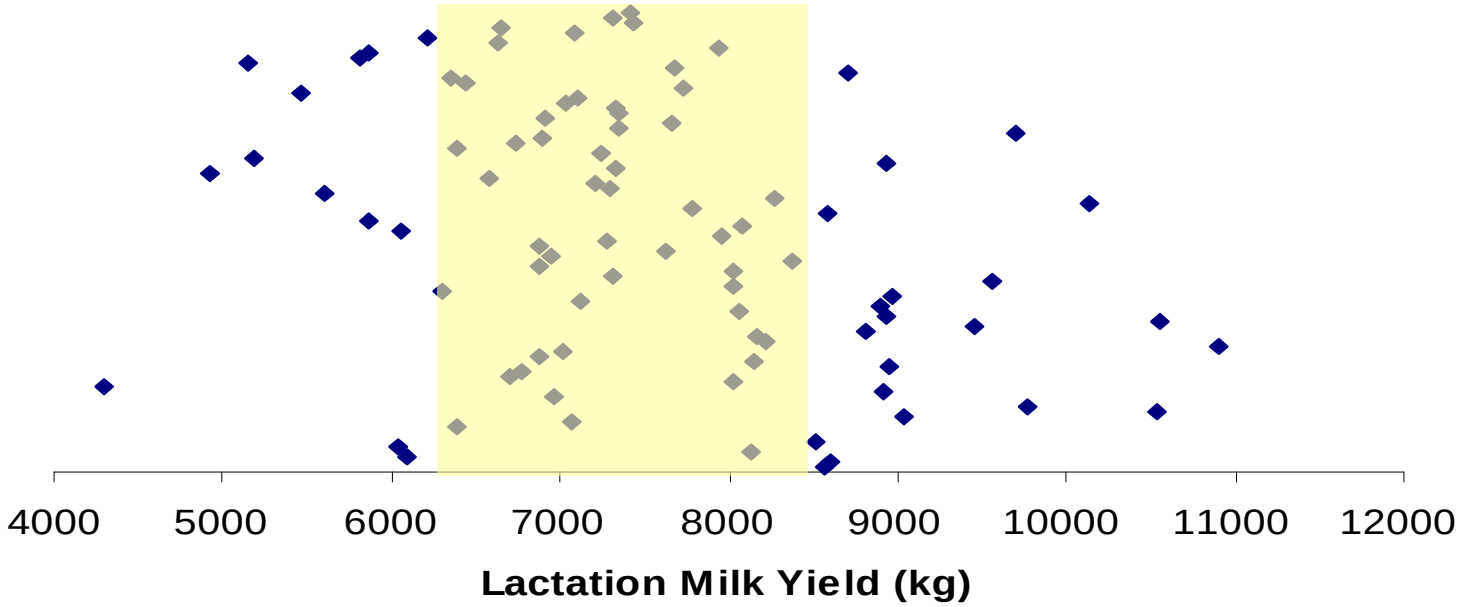
Johnstown Castle- Herd Update
June 23rd 2013

Teagasc
Agriculture and Food Development Authority

The Irish Agriculture and Food Development Authority

Johnstown Herd Details - Milk Yield per Cow



7290kg @ 4.00% Fat 3.53% Protein

HerdPlus
Profit through Science

We want…

- High Fertility
- High milk solids
- 160 -180kg milk
- Functional cows

Animal Group	Num of Cows	Milk Kg / Fat / Prot	% / %	Surv% / CI Days	Milk % Cont	Fertility % Cont	Calv % Cont	Beef % Cont	Maint % Cont	Mgmt % Cont	Health % Cont	EBI €
Cows with EBI	112	189			€ 49	€ 71	€ 24	€ -4	€ 2	€ 1	€ 2	€ 145
Missing EBI*	0	9.3	0.04	2.0	32.1%	46.5%	15.4%	-2.5%	1.5%	0.8%	1.1%	
Total Cows	112	9.1	0.05	-4.0								
1st Lactation	44	188			€ 56	€ 68	€ 26	€ -6	€ 2	€ 0	€ 2	€ 149
		11.0	0.08	1.7	35.1%	42.3%	16.3%	-3.7%	1.2%	0.1%	1.2%	
		9.9	0.07	-4.0								
2nd Lactation	34	210			€ 46	€ 69	€ 23	€ -2	€ 2	€ 3	€ 0	€ 141
		8.7	0.02	2.0	31.8%	47.3%	16%	-1.6%	1.2%	1.9%	0.2%	
		9.0	0.04	-3.8								
3rd Lactation	10	114			€ 41	€ 68	€ 24	€ -2	€ 2	€ 1	€ 3	€ 137
		7.2	0.06	2.1	28.9%	48.3%	17.2%	-1.6%	1.1%	0.8%	2.1%	
		7.0	0.06	-3.7								
4th Lactation	7	170			€ 51	€ 95	€ 22	€ -4	€ 6	€ 0	€ 1	€ 172
		11.1	0.09	2.7	28.5%	53%	12.1%	-2.1%	3.5%	-0.1%	0.7%	
		8.9	0.06	-5.3								
5th Lactation (+)	17	203			€ 40	€ 75	€ 18	€ -3	€ 3	€ 2	€ 3	€ 138
		6.5	-0.02	2.2	27.8%	52.4%	12.5%	-2%	2.1%	1.4%	1.9%	
		8.2	0.03	-4.1								

2. Dairy Youngstock

12 Calves	48	169			€ 59	€ 83	€ 31	€ -9	€ 4	€ 1	€ 2	€ 171
Missing EBI*	0	11.7	0.10	2.3	31%	43.7%	16.4%	-5%	2.2%	0.7%	1.1%	
Total Calves	48	9.9	0.09	-4.6								
11 Calves	35	180			€ 54	€ 78	€ 28	€ -4	€ 0	€ 1	€ 3	€ 160
Missing EBI*	0	10.4	0.07	2.1	32%	46.6%	16.6%	-2.4%	-0.2%	0.7%	1.5%	
Total Calves	35	9.5	0.07	-4.5								

Experiment 2012-14:
Feed to Yield Trial on Split Calving Herds

Objective:

‘To compare performance and profit of split calving herds managed under ***feed-to-yield*** or ***feed-to-budget*** systems’

Feed to Yield System - “Reds”

‘Meet the nutritional requirements of the INDIVIDUAL COW while managing the system to maximise use of quality forage’

Stocking rate 3.1 cows per ha

Indoor diet –

- Flat rate to stated yield e.g. 22 litres
- Supplement on a yield basis thereafter e.g. 0.4kg per litre to a threshold value

At pasture –

- Estimate contribution of base pasture diet
- Use supplements to meet yield potential
- Maintain sward quality by managing pre-grazing yield

Feed to Budget System - “Greens”

‘Meet nutritional requirements of THE HERD by maximising utilisation of forage on the grazing block and strategic use of supplements to manage feed deficits as dictated by budget’

Stocking rate 3.1 cows per ha

Indoor diet –

- Flat rate meal feeding of fresh and stale cows (e.g. 7kg plus 3kg)
- Additional forage (e.g. maize) imported as per winter forage deficit

At pasture –

- Conventional pasture budgeting practices
- Use supplement to address pasture deficits
- Maintain sward quality by standard management

Systems compared

	Feed to Budget	Feed to Yield
Winter	13kg silage Fresh 7kg Stale 4kg meal	13kg silage 21 litres plus 0.5kg per litre
Spring	Spring Rotation Plan Flat rate meal	Spring Rotation Plan 22 litres + 0.5kg per litre
Summer	Grass wedge Flat rate meal	Grass wedge 25 litres + 0.5kg per litre
Autumn	Autumn budget 70:30 Flat rate meal feeding	Autumn budget 70:30 21 litres + 0.5kg per litre

48 cows per group, mean calving date 10th Oct and 20th Feb

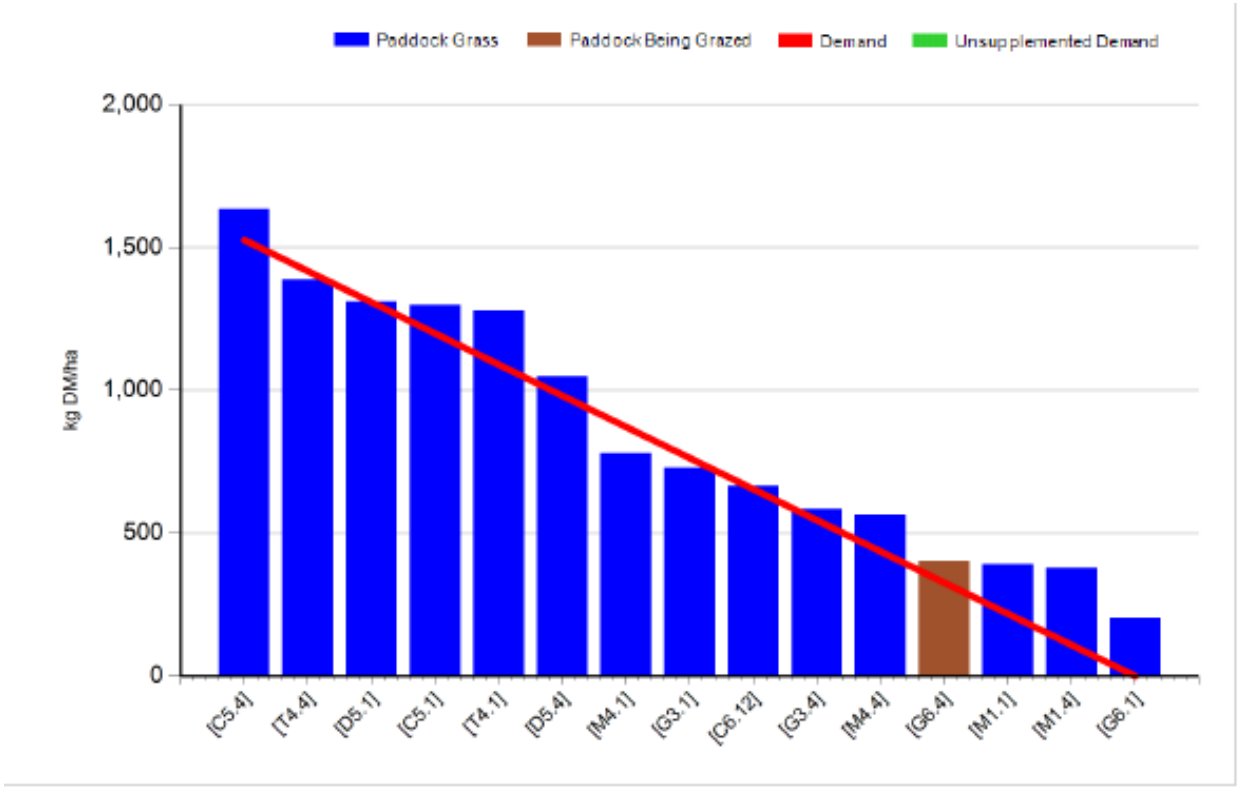
Current Situation- Autumn Calving

	Feed to Yield	Feed to Budget
This Week (23/6/13)		
Milk Kg	20.3	18.4
Fat %	4.07	4.04
Protein %	3.72	3.84
Milk Solids kg	1.58	1.45
Parlour Concentrate kg	1.0	0.6
Other supplement kg DM	0	0
Cumulative (258 days in milk)		
Milk kg	6620	6473
Milk Solids kg	493	476
Concentrate fed Parlour (Total)	821 (1231)	871 (1281)

Current Situation- Spring Calving

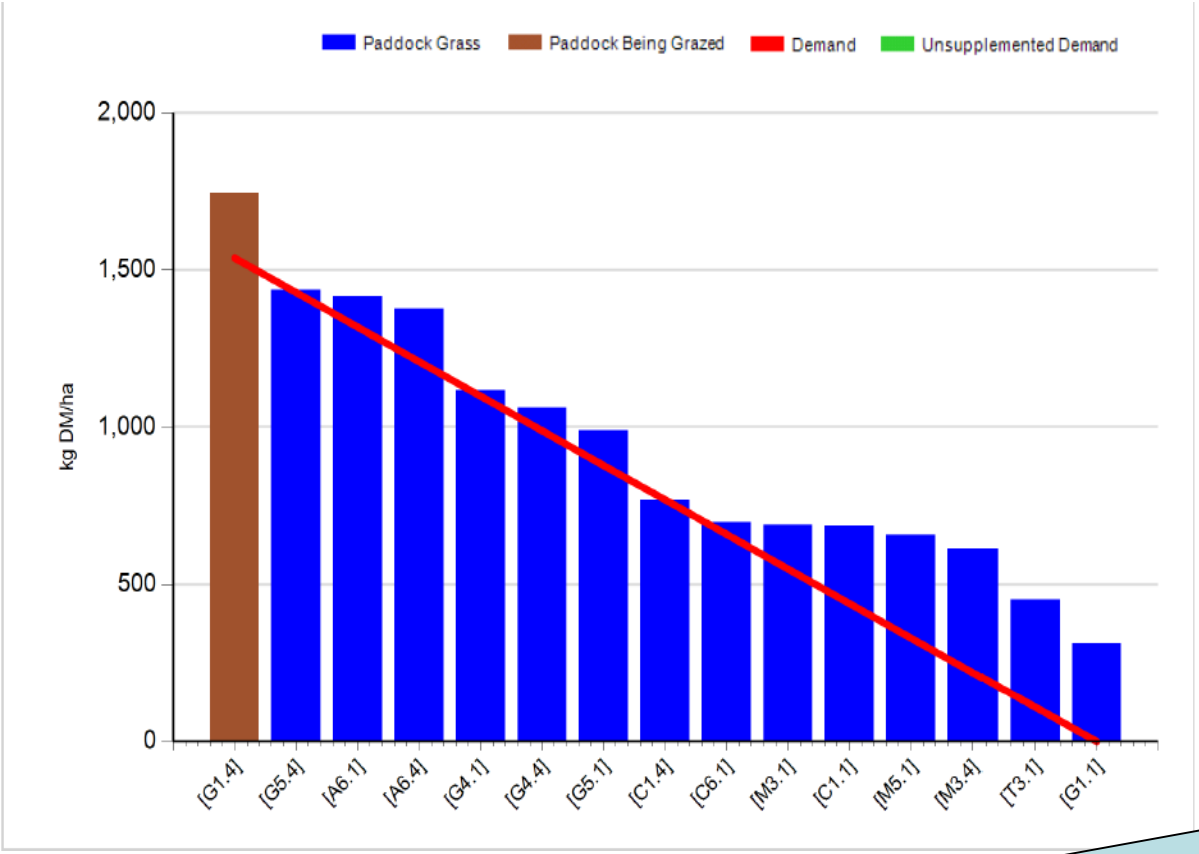
	Feed to Yield	Feed to Budget
This Week (2/6/13)		
Milk Kg	29.7	25.1
Fat %	3.58	3.43
Protein %	3.36	3.53
Milk Solids kg	2.06	1.75
Parlour Concentrate kg	3.5 avg	0.6
Other supplement kg DM	0	0
***Cumulative** (96 days in milk)*		
Milk kg	3592	3204
Milk Solids kg	251	188
Concentrate fed Parlour	482	255

Current Situation- Feed to Budget



- Farm cover 840 kg DM ha
- Farm cover 190kg DM cow
- SR 4.43 cows ha
- Grass allocation 18kg DM*
- Residual 3.8cm
- Growth 68kg DM per day

Current Situation- Feed to Yield



- Farm cover 933kg DM ha
- Farm cover 229kg DM cow
- SR 4.07 cows ha
- Grass allocation 18kg DM*
- Residual 4.1cm

- Bale out paddock A6.1 to bring cover to closer target 170kg /cow
- Growth rate 67 and demand 70 so cautious not to remove too much
- Will bale G4.4 and possibly G5.1 if needed

Feeding 0.5kg meal per litre above 25kg

Effect of calving interval on milk revenue losses for 100 cow herd

	Herd Base[2] Production Level (litres)		
Herd Calving Interval	***6000***	***7000***	***8000***
401	€9,660[3]	€7,320	€4,380
422	€16,770	€13,620	€9,060
443	€23,760	€20,700	€14,970
464	€30,570	€28,020	€20,490
485	€37,290	€35,370	€26,520

[1]Relative to a 375 day calving interval
[2] Based on 305-d yield for a herd with 370 day calving interval
[3] Based on a 30cpl annualised milk price

Our objective is a 370 d calving interval
Current 383 days