

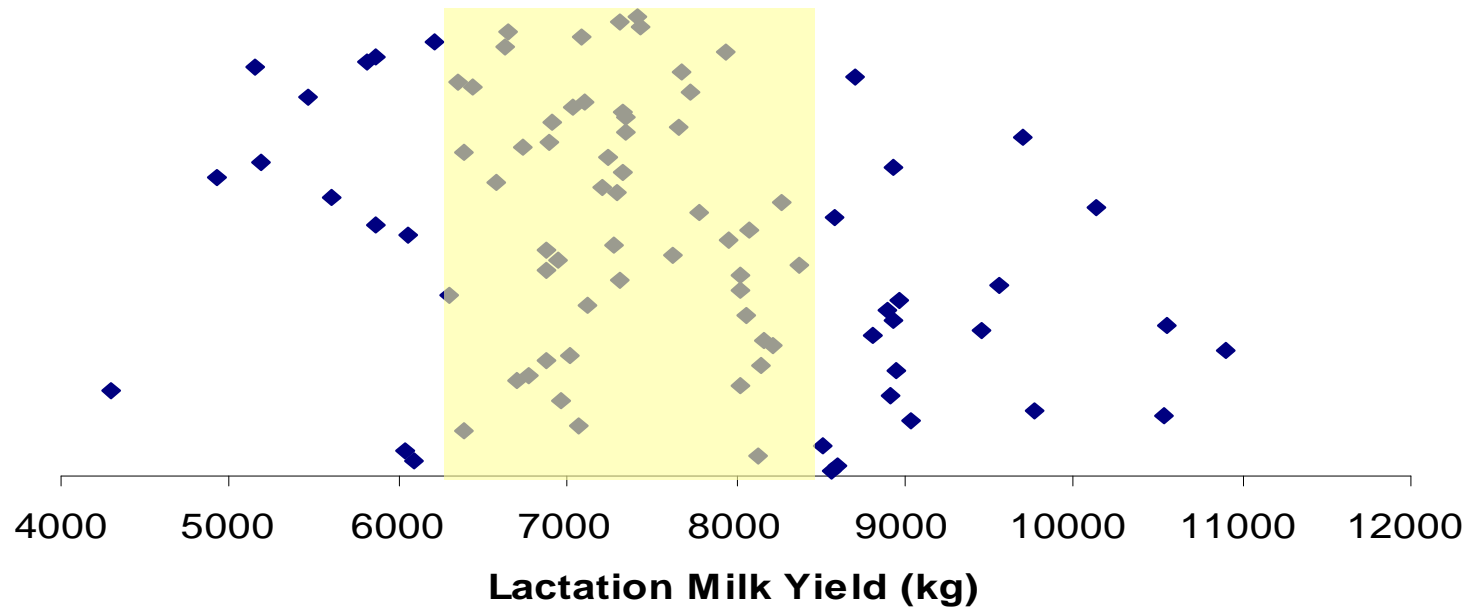
# Johnstown Castle- Herd Update

## July 15<sup>th</sup> 2013



The Irish Agriculture and Food Development Authority

## Johnstown Herd Details - Milk Yield per Cow



**7290kg @ 4.00% Fat 3.53% Protein**



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								



The Irish Agriculture and Food Development Authority



## 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. 0.5kg 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 10<sup>th</sup> Oct and 20<sup>th</sup> Feb

## Current Situation- Autumn Calving

	Feed to Yield	Feed to Budget
<b><i>This Week (23/6/13)</i></b>		
Milk Kg	19.1	16.4
Fat %	4.09	3.88
Protein %	3.95	3.83
Milk Solids kg	1.53	1.26
Parlour Concentrate kg	4	4
Other supplement kg DM	5	5
<b><i>Cumulative (275 days in milk)</i></b>		
Milk kg	7039	6838
Milk Solids kg	527	505
Concentrate fed Parlour (Total)	834 (1243)	879 (1289)

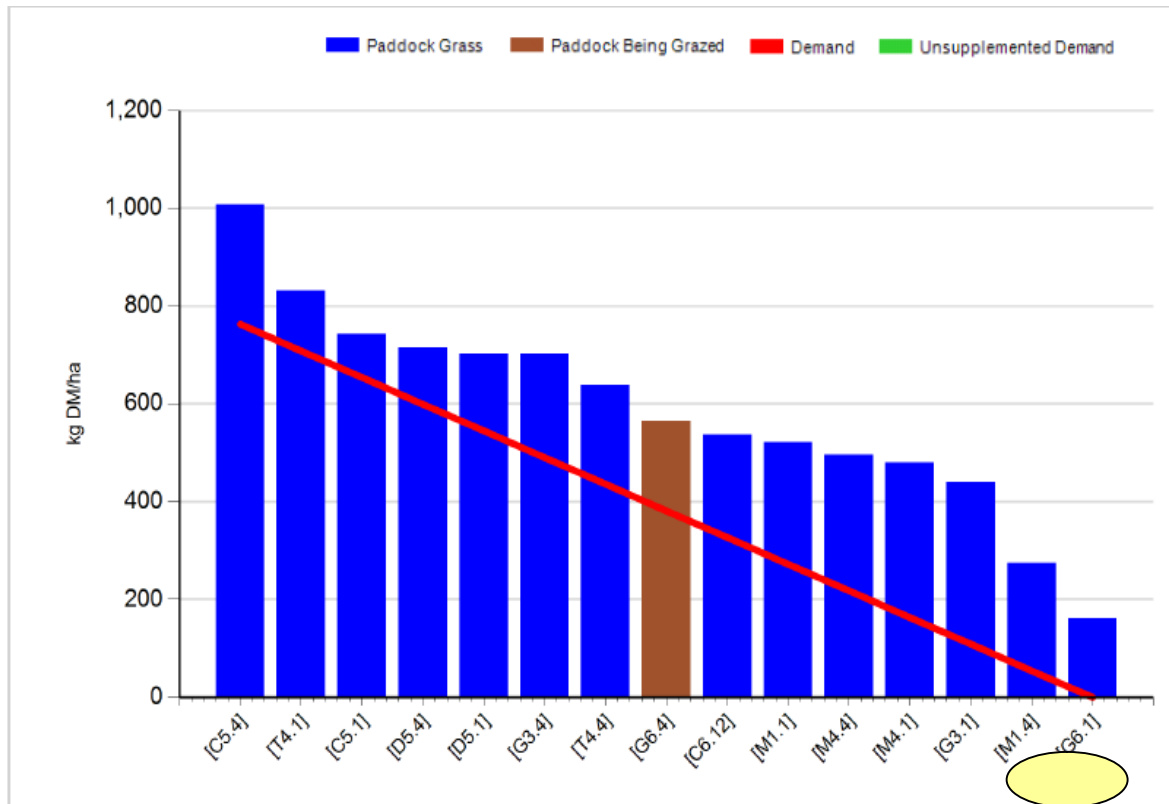
**35% autumn calving cows to be dried off this week  
Reduce grass demand**



## Current Situation- Spring Calving

	Feed to Yield	Feed to Budget
<b><i>This Week (2/6/13)</i></b>		
Milk Kg	26.5	22.4
Fat %	3.65	3.49
Protein %	3.69	3.55
Milk Solids kg	1.94	1.75
Parlour Concentrate kg	5.2 avg	4
Other supplement kg DM	5	5
<b><i>Cumulative (136 days in milk)</i></b>		
Milk kg	4196	3705
Milk Solids kg	296	265
Concentrate fed Parlour	534	254

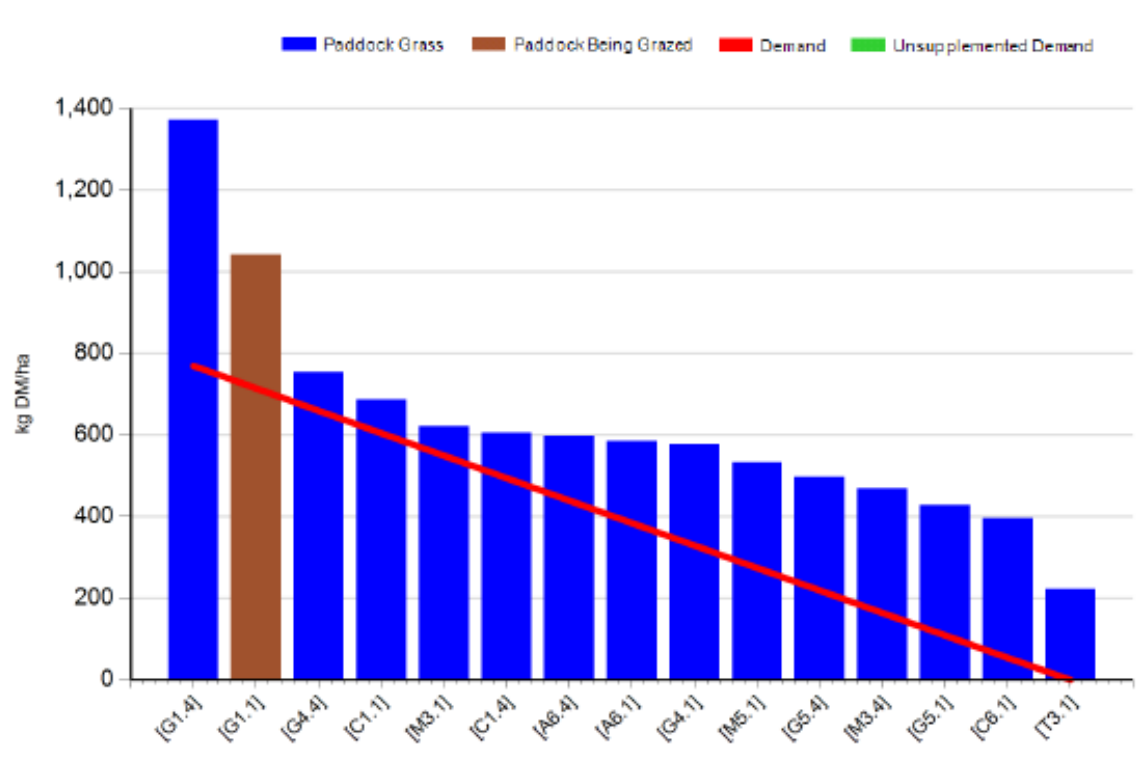
## Current Situation- Feed to Budget



- **Growth 14kg DM per day**
- Farm cover 581 kg DM ha
- Farm cover 131kg DM cow
- SR 4.43 cows ha
- Grass allocation 8kg DM\*
- **Silage 5kg DM**
- **Concentrate 4kg**
- Residual ht 3.8cm

Need to reduce daily grass allowance - low growth rate

## Current Situation- Feed to Yield



- Farm cover 645kg DM ha
- Farm cover 158kg DM cow
- SR 4.07 cows ha
- Base Diet
  - Grass 8kg DM\*
  - **Silage 5kg DM**
  - **Concentrate 4kg**
- Residual 3.7cm
- **Growth Rate 18kg per day**

Base diet for 25kg milk  
Feeding 0.5kg meal per litre above 25kg

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

Herd Calving Interval	Herd Base <sup>2</sup> Production Level (litres)		
	6000	7000	8000
401	€9,660 <sup>3</sup>	€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

<sup>1</sup>Relative to a 375 day calving interval

<sup>2</sup>Based on 305-d yield for a herd with 370 day calving interval

<sup>3</sup>Based on a 30cpl annualised milk price

Our objective is a 370 d calving interval  
Current 383 days