

# Johnstown Castle- Herd Update

## April 6<sup>th</sup> 2014

We want...

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

Animal Group	Num of Cows	Milk Kg		Surv% CI Days	Milk % Cont	Fertility % Cont	Calv % Cont	Beef % Cont	Maint % Cont	Mgmt % Cont	Health % Cont	EBI €
		Fat	%									
Cows with EBI	132	169			€ 52	€ 80	€ 25	€ -4	€ 3	€ 2	€ 1	€ 159
Missing EBI*	0	9.1	0.05	2.0	31.3%	48%	15%	-2.3%	1.6%	1%	0.8%	
Total Cows	132	8.7	0.06	-4.5								

## 2. Dairy Youngstock

13 Calves	49	148			€ 62	€ 100	€ 33	€ -7	€ 6	€ 3	€ 1	€ 198
Missing EBI*	1	12.9	0.14	2.7	29.3%	47.3%	15.4%	-3.2%	2.8%	1.5%	0.4%	
Total Calves	50	9.3	0.09	-5.5								
12 Calves	31	141			€ 59	€ 100	€ 34	€ -5	€ 3	€ 3	€ 2	€ 195
Missing EBI*	0	11.6	0.12	2.5	28.6%	48.5%	16.7%	-2.5%	1.4%	1.3%	0.9%	
Total Calves	31	8.9	0.08	-5.6								

# 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

# 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

## Current Situation- Autumn Calving Sections

	Feed to Yield	Feed to Budget
<b><i>This Week (6/4/14)</i></b>		
Milk Kg	26.2	26.9
Fat %	4.30	4.24
Protein %	3.72	3.73
Milk Solids kg	2.09	2.12
Concentrate kg	3.87 avg	5.0
Other supplement kg DM	(silage/maize at night depending on weather conditions )	(silage/maize at night depending on weather conditions )
<b><i>Lactation to date (178 dim)</i></b>		
Milk kg	4578	4420
Milk Solids kg	349	336
Parlour Conc. date	528	568

## Current Situation- Spring Calving

	Feed to Yield	Feed to Budget
<b><i>This Week (6/4/14)</i></b>		
Milk Kg	37.7	35.3
Fat %	3.79	4.15
Protein %	3.36	3.34
Milk Solids kg	2.69	2.63
Parlour Concentrate kg	8.02 avg	5.0
Other supplement kg DM	(silage/maize at night depending on weather conditions )	(silage/maize at night depending on weather conditions )
<b><i>Cumulative ( )</i></b>		
Milk kg		
Milk Solids kg		
Concentrate fed Parlour		

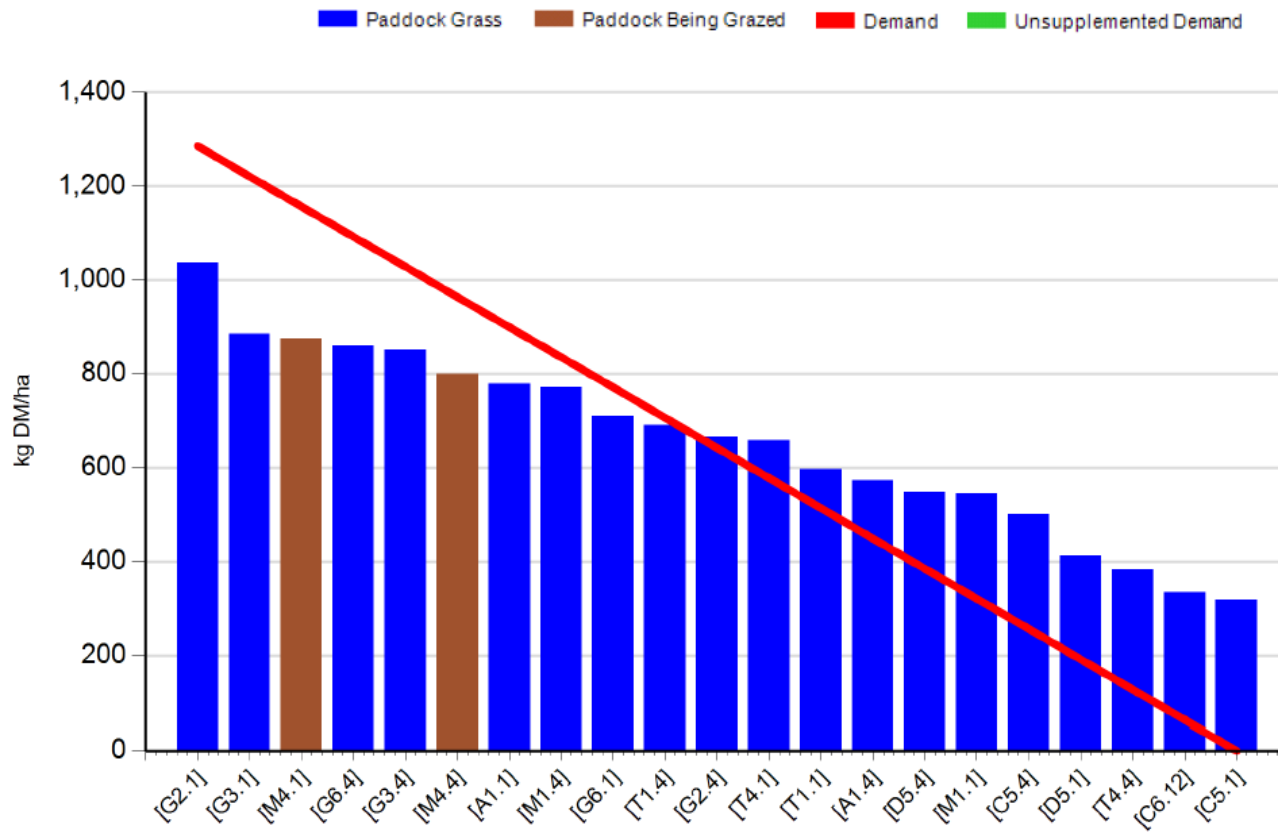
Approx. 80% calved to date  
Avg 32 days in milk



## Current Situation- Grazing and feeding

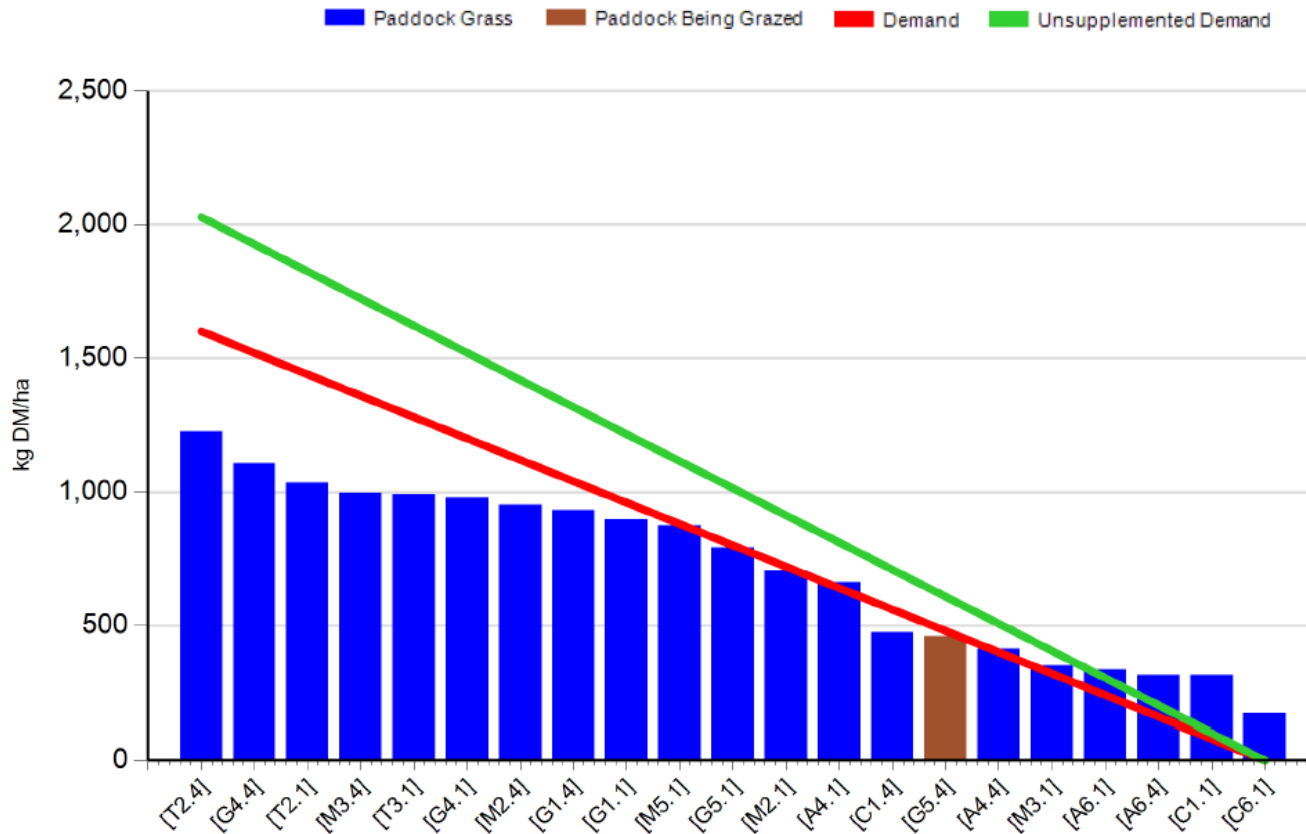
- Grazing conditions difficult
  - Rainfall for 1<sup>st</sup> 6 days in April 34mm (almost 50% of normal monthly total)
  - 40kg ha N due to be spread this week
  - Fertilizer on silage are has been delayed- plan to go this week
- Managing ground conditions
  - Housing by night and feeding 4kg DM silage and maize if required
  - Selecting drier paddocks with lower covers (1100kg)
  - Conditions improving this week
- Grass allocation has increased to 14-15kg DM this week
  - Farm cover adequate over >550kg DM per ha
  - Forecasting dry conditions with soil temp 9-10 deg.
  - Project end of first rotation on April 14<sup>th</sup>
- Adequate stocks of feed to date

## Current Situation- Feed to Budget



- Farm cover 656 kg DM ha  
214 per cow
- Growth 27kg DM per day
- SR 3.06 cows ha
- Grass allocation 14kg DM
  - Demand 42kg DM/day
- Feeding 5kg high energy conc.
- Grazing Residual 4.2cm
- 30kg/ha N applied this week

## Current Situation- Feed to Yield



- Farm cover 720 kg DM ha  
236 per cow
- Growth 30kg DM per day
- SR 3.05 cows ha
- Grass allocation 15kg DM
  - Demand 46kg DM/day
- Feeding 1kg high energy conc.
  - Plus 0.5kg per 1kg milk above 22kg
  - Max conc. 10kg per day
- Grazing Residual 4.2cm
- 30kg/ha N applied this week

## Breeding and Bull Selection

- Herd is 60% Autumn and 40% spring
  - 2 x 10-week calving seasons
  - Spring breeding period commences May 1<sup>st</sup>
- Compact calving and fertility targets:
  - 75% cows calving in first 6 weeks of each season
  - Calving interval 383 days- Increases annual milk sales per cow
  - Less than 5% carryover cows currently
- Must get a high submission rate (90%) in 3 weeks to achieve this:
  - BCS at dry off, calving and breeding
  - Rising plane of nutrition post-calving
  - Identify and treat problem cows in advance of breeding start date
  - Genetics\*
- Age at first calving 22 – 24 months. No recycled maiden heifers

## Breeding Bull Selection

- Herd produced 7123kg @ 4.07% fat and 3.56% protein in 2013
  - Target increase milk EBI sub-index by selecting bull team +30kg fat and protein
  - Milk volume of +180kg is adequate
- Fertility EBI sub-index has a huge impact on delivering herd potential for winter herds
  - More days in milk, less time dry, more mature cows
  - **Aiming to increase herd fertility sub-index to €100**
- Functional traits
  - Avoiding extremes negative scores for health EBI sub-index
  - Breeding for moderate/smaller size, positive for body condition score
  - Avoiding extreme scores for udders, feet
- Bull team of 9 sires (7 genomic) selected and matched to individual cows using HerdPlus (ICBF)

The following is the output of Sire Advice program for your herd.

	EBI(E)	EBI Sub Index							PTA's							
		Milk (E)	Fert (E)	Calv (E)	Beef (E)	Maint (E)	Mmgt (E)	Hlth (E)	M Kg	F Kg	P Kg	F+P Kg	F %	P %	CI days	SU %
<b>All Cows in Herd</b>	<b>159</b>	52	80	25	-4	0	2	1	169	9.1	8.7	17.9	0.05	0.06	-4.5	2.0
<b>Predicted 2015 Calves</b>	<b>234</b>	75	123	32	-7	6	3	0	180	14.6	11.5	26.0	0.14	0.11	-6.7	3.3
<b>Bulls Weighted Averages</b>	<b>308</b>	98	165	39	-9	12	3	0	192	20.0	14.2	34.2	0.23	0.15	-8.8	4.7