Johnstown Castle- Herd Update
May 22nd 2014

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	**117**	**182**					**€ 53**	**€ 83**	**€ 25**	**€ -5**	**€ 2**	**€ 1**	**€ 2**	**€ 161**
Missing EBI*	0	9.5	0.05		2.0		31.1%	48.5%	14.7%	-2.9%	0.9%	0.7%	1.1%	
Total Cows	117	9.0	0.06		-4.7									

2. Dairy Youngstock

14 Calves	**19**	**211**					**€ 74**	**€ 101**	**€ 30**	**€ -9**	**€ 8**	**€ 2**	**€ 0**	**€ 206**
Missing EBI*	0	12.6	0.09		2.7		33.1%	45%	13.1%	-4.2%	3.6%	1%	0%	
Total Calves	19	12.1	0.1		-5.6									
13 Calves	**48**	**148**					**€ 61**	**€ 100**	**€ 32**	**€ -8**	**€ 5**	**€ 3**	**€ 1**	**€ 194**
Missing EBI*	1	12.7	0.14		2.7		29.1%	47.3%	15.2%	-3.9%	2.5%	1.4%	0.6%	
Total Calves	49	9.2	0.09		-5.4									

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

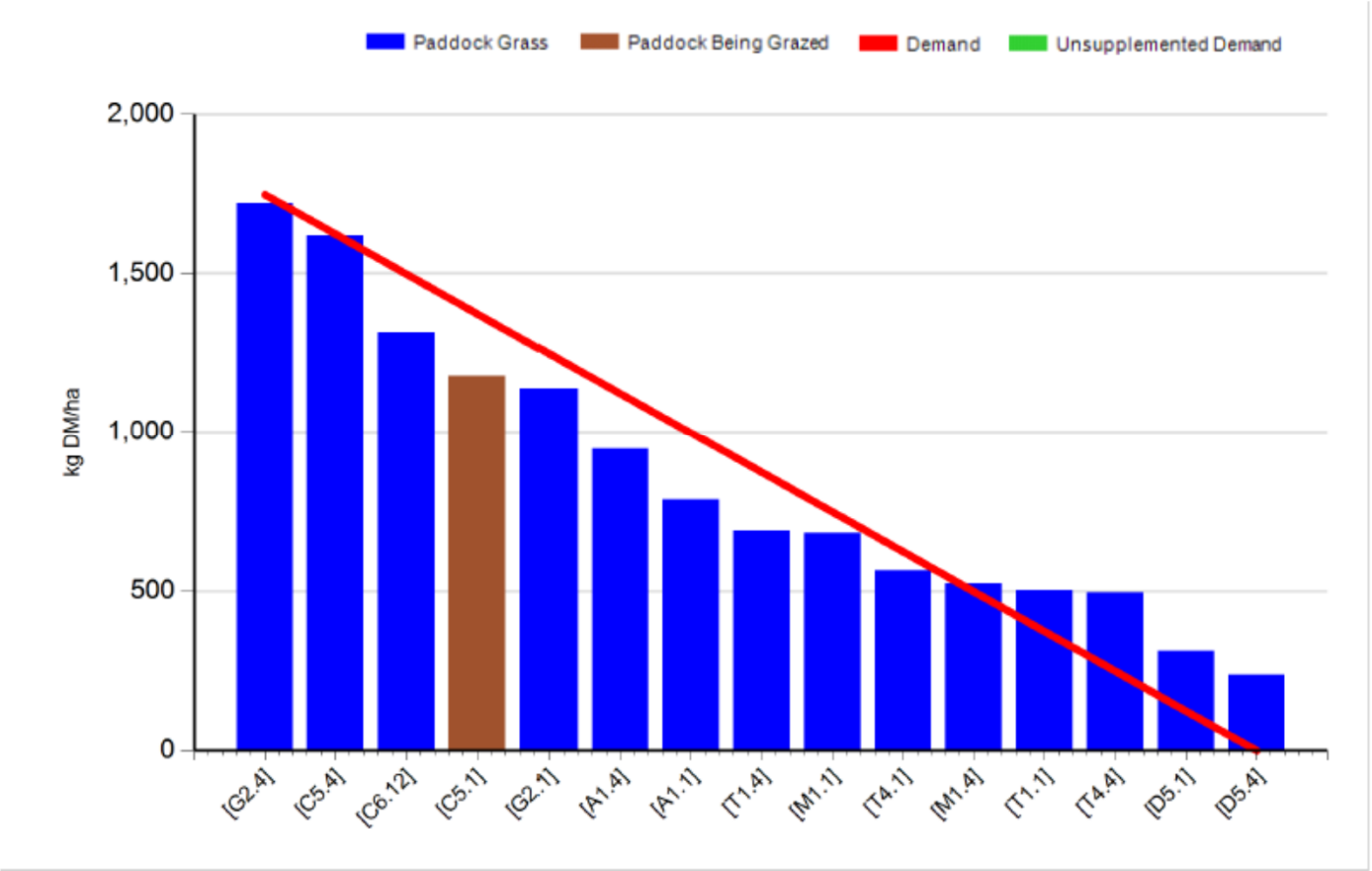
Current Situation- Autumn Calving Sections

	Feed to Yield	Feed to Budget
This Week (22/5/14)		
Milk Kg	24.1	22.3
Fat %	3.99	3.91
Protein %	3.75	3.75
Milk Solids kg	1.84	1.68
Concentrate kg	1.34 avg.	0.6
Other supplement kg DM	-	-
Lactation to date (226 dim)		
Milk kg	5575	5378
Milk Solids kg	423	412
Concentrate Fed	921	983

Current Situation- Spring Calving

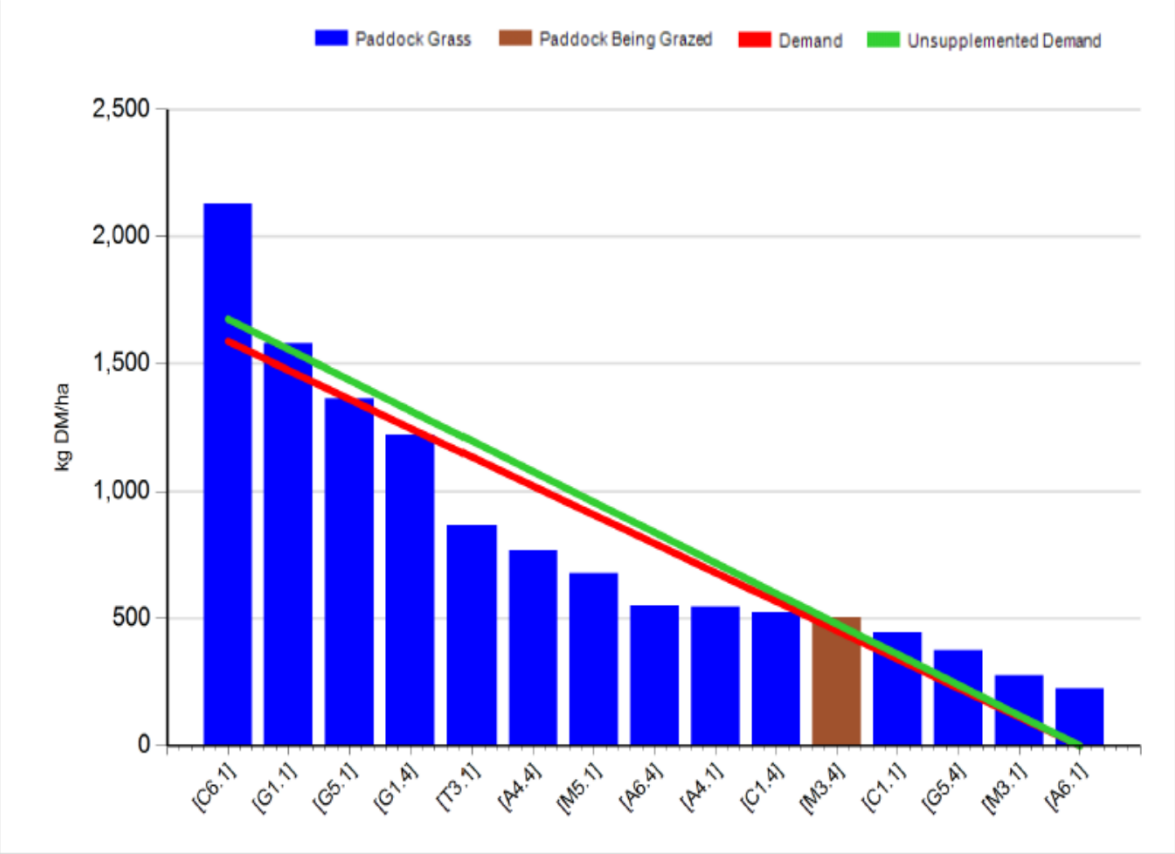
	Feed to Yield	Feed to Budget
This Week (22/5/14)		
Milk Kg	32.9	30.5
Fat %	3.54	3.55
Protein %	3.47	3.41
Milk Solids kg	2.27	2.11
Parlour Concentrate kg	4.9	0.6
Other supplement kg DM	-	-
***Cumulative** (80 days in milk)*		
Milk kg	2388	1995
Milk Solids kg	173	148
Concentrate fed	326	174

Current Situation- Feed to Budget



- Farm cover 874 kg DM ha
  194 per cow
- Growth 61kg DM per day
- Current SR 4.50 cows ha
- Grass allocation 18kg DM
  - **Demand 83kg DM/day**
- Feeding 0.6kg high energy conc.
- Grazing Residual 4.0cm
- 30kg/ha N applied this week

Current Situation- Feed to Yield



- Farm cover 720 kg DM ha
  236 per cow
- Growth 64kg DM per day
- Current SR 4.20 cows ha
- Grass allocation 18kg DM
  - **Demand 76kg DM/day**
- Feeding 0.6kg high energy conc.
  - Plus 0.5kg per 1kg milk above 22kg
  - Max conc. 10kg per day
- Grazing Residual 4.1cm
- 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 commenced May 1st

- 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 Sub Index							PTA's							
	EBI(E)	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 %
All Cows in Herd	159	52	80	25	-4	0	2	1	169	9.1	8.7	17.9	0.05	0.06	-4.5	2.0
Predicted 2015 Calves	234	75	123	32	-7	6	3	0	180	14.6	11.5	26.0	0.14	0.11	-6.7	3.3
Bulls Weighted Averages	308	98	165	39	-9	12	3	0	192	20.0	14.2	34.2	0.23	0.15	-8.8	4.7