

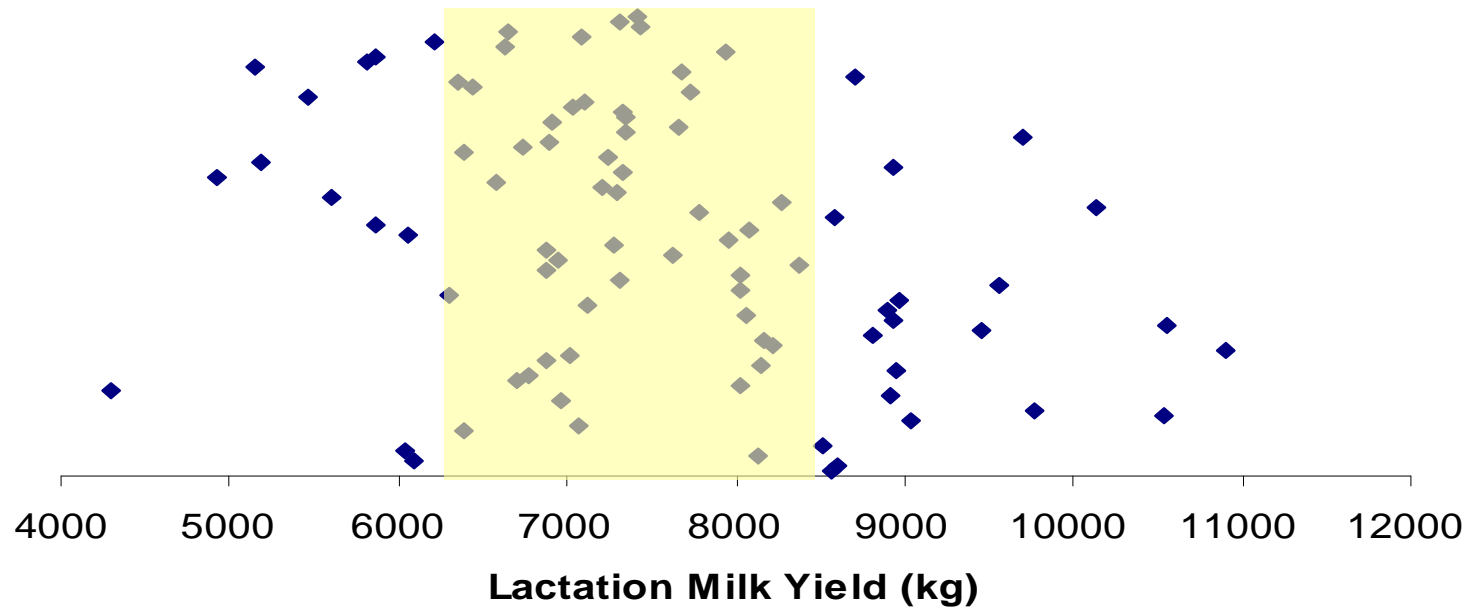
Johnstown Castle- Herd Update

Dec 1st 2013



The Irish Agriculture and Food Development Authority

Johnstown Herd Details - Milk Yield per Cow





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								



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

Herd Calving Interval	Herd Base ² Production Level (litres)		
	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

¹Relative to a 375 day calving interval

²Based on 305-d yield for a herd with 370 day calving interval

³Based on a 30cpl annualised milk price

Our objective is a 370 d calving interval
Current 382 days

The background of the slide is a photograph of a cow in a barn stall. The cow is white with some dark patches, and it is standing in a stall with wooden bars. The floor is covered with straw bedding. The image is slightly faded to allow the text to be read clearly.

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 10th Oct and 20th Feb

Current Situation- Autumn Calving (in milk)

	Feed to Yield	Feed to Budget
<i>This Week (1/12/13)</i>		
Milk Kg	26.7	25.8
Fat %	3.73	3.80
Protein %	3.42	3.58
Milk Solids kg	1.89	1.88
Parlour Concentrate kg	7.2 avg	8
<i>Lactation yield (since Sept 1)</i>		
Milk kg	1326	1122
Milk Solids kg	96	82
Concentrate fed Parlour (Total)	-	-

100% 2013 autumn herd calved by this week

Current Situation- Spring Calving







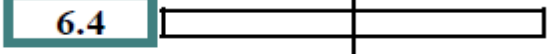
	Feed to Yield	Feed to Budget
<i>This Week (25/10/13)</i>		
Milk Kg	16.9	18.5
Fat %	3.94	4.11
Protein %	3.95	4.13
Milk Solids kg	1.32	1.50
Parlour Concentrate kg	5avg	8
Other supplement kg DM	-	-
<i>Cumulative (290 days in milk)</i>		
Milk kg	6913	6529
Milk Solids kg	502	475
Concentrate fed Parlour	893	643

66% 2013 spring herd dry by this week

Current Situation- Feeding

	Feed to Budget	Feed to Yield
Grass Silage kg DM	8.0	8.0
Maize Silage kg DM	5.5	5.5
Coarse blend Concentrate	2.5	2.5
Parlour Concentrate	4.5	1kg flat plus 0.5 kg per litre over 20.5 litres
<i>Diet Composition</i>		<i>Showing total diet vales for 30 litres - values change with yield</i>
UFL	0.92	0.93
PDIN/ PDIE	95/94	96/94
Crude Protein %	14.6	14.8
NDF	41.4	40.9

Maize silage Analysis

<i>Item</i>	<i>Units</i>	<i>Normal Desirable Values</i>	<i>Result</i>
<i>Dry Matter</i>	%	22.0 - 35.0	38.8 
<i>pH</i>	-	3.5 - 3.9	3.9 
<i>ASH</i>	%	3.2 - 4.5	4.0 
<i>NDF</i>	%	42.0 - 55.0	51.30 
<i>Starch</i>	%	20.0 - 28.0	31.0 
<i>ME</i>	<i>MJ/kg</i>	10.5 - 11.5	11.9 
<i>Crude Protein</i>	%	6.5 - 10	6.4 

Grass Silage Analysis

<i>Item</i>	<i>Units</i>	<i>Desirable Values</i>	<i>Result</i>	<i>Status</i>
<i>Dry Matter</i>	%	20 - 30	42.6	-
<i>pH</i>	-	4 - 4.7	4.6	Good
<i>Ammonia N</i>	% of Total N	< 10.1	9.5	Good
<i>ASH</i>	%	< 8.6	9.0	Moderate
<i>NDF</i>	%	< 45.0	41.80	Good
<i>DMD</i>	%	> 68.9	74.4	Good
<i>ME</i>	MJ/kg	> 9.8	10.7	Good
<i>Crude Protein</i>	%	13.5 - 17	14.6	Good

<i>Item</i>	<i>Units</i>	<i>Normal Range</i>	<i>Result</i>	<i>Status</i>
<i>PDIN</i>	g/kg	65 - 102	87	A
<i>PDIE</i>	g/kg	58 - 83	81	
<i>PDIA</i>	g/kg	16 - 37	27	
<i>UFL</i>	per kg	.65 - .90	0.84	
<i>UFV</i>	per kg	.59 - .89	0.80	
<i>SFU</i>	per kg	1.04 - 2.81	1.33	
<i>LFU</i>	per kg	.95 - 1.89	1.10	
<i>CFU</i>	per kg	.96 - 1.92	1.11	
<i>DM Intake Cattle</i>	g/kg $W^{0.75}$	70 - 130	120	
<i>DM Intake Sheep</i>	g/kg $W^{0.75}$	60 - 140	112	

Coarse Blend – Fed as Part of Base Diet

Analysis	/ kg DM	/ kg as fed
DM %	87.4	87.4
UFL	1.13	0.99
UFV	1.11	0.97
Protein g	228	199
PDIN g	155	135
PDIE g	137	119
Starch g	219	191
CF g	169	148
Oil g	37	33
Ash g	46	40

Ingredients % as fed	
Barley	30.00
Maize distillers	25.00
Soyabean meal 48% CP	15.00
Soya hulls	30.00

Current Situation- Breeding and Herd Health

- 100% autumn calved cows by calved this week
 - Start date Sept 20th
- Herd health to date
 - Milk fever 0%
 - Retained placenta 1%
 - Ketosis 0%
 - Displaced abomasum 0%
 - Assisted calving 2%
- Planned start of mating 15th December
 - Scanning for non-cycling cows this week
 - Wash out any suspect metritis cases
 - Replacement heifers weighed last week – 88% above 350kg
- Remaining spring calving cows to be dried off before mating starts