Johnstown Castle Weekly Farm Notes- January 15th

Introduction

These management notes refer to the Johnstown Winter Milk Herd in Co Wexford. This herd has:

- 100% autumn calving
- A mean calving date of October 8th. Calving commences in early September and continues until early December.
- A Holstein Friesian base with an EBI of €119 (see page 3). Aim is a 50:50 balance for milk and fertility

The herd produces approximately 45% of annual supply from October to February inclusive. This includes 20% of annual supply in December and January.

A new experiment commenced in October 2011, comparing different concentrate feeding systems at similar stocking rates (3.25 cows per ha). Briefly, the systems compared are:

Feed to budget (GREEN): Maximizes the proportion of quality forage in the milking diet. Supplements used to balance feed availability and demand at a herd level. Flat-rate concentrate feeding at pasture and during housing.

Feed to yield (RED): Meets the daily nutritional demands of the cow while maximising quality forage in the diet. Concentrates offered on an individual cow basis, depending on yield and the base diet.

There are 42 cows per group. For reference, management notes will refer to the flat rate **(GREEN)** group

Management Issues

- Feeding management- Forage quality and diet composition
- Breeding and submission rate - target >80% of cows submitted in first 21 days of breeding season
- Planning for start of grazing season
- Somatic cell and milk quality issues

Current Situation

- Current milk yield is steady at 27.4kg at 2.00kg milk solids, at 116 days in milk (see table). Max milk yield in group is 38.1kg, top 25% average 33.1kg. Milk protein stands at 3.35%, and has averaged 3.39% since the start of lactation

- Cows are offered 20.5kg DM, comprising 8kgDM maize silage (see quality report below), 5.5kg DM grass silage, 3kg of coarse blend concentrate (as shown below), and 5kg of high energy (0.96UFL) 18% CP concentrate in the parlour.

- There have been no recorded cases of metabolic disorders or digestive upsets to date in the milking herd. Achieving >13kgDM from forage is likely to be of benefit in this regard.

- Total diet specification is
    - 34% DM
    - 0.95 UFL
    - 103/101 PDIN/PDIE
    - 21% starch plus sugar
    - 39% NDF and 21% ADF. There is no requirement for straw in this mix

- Cows were turned out to pasture after morning milking for 4 hours on 3 days this week, in good grazing conditions. Indoor forage allowance was reduced by 25% (to 9.5kgDM) before grazing to promote grass DM intake.

- Heaviest pre-grazing yields on the farm are approx 1300kgDM, however cows are turned out on paddocks with pre-grazing yields of 800-900kgDM for the first 4-5 days grazing. This helps to minimize damage and pasture wastage. Grazing ceased towards the weekend due to inclement weather conditions.

- Breeding commenced on December 5th. Submission rate in the first 3 weeks of breeding was satisfactory at 84%. 100% of cows have been submitted for first service as of this week A CIDR programme was used on 2 cows that were non-cycling by day 70 post calving. An automated heat detection (pedometer) system is used in conjunction with tail paint. To improve oestrous activity indoors, cows have access to a solid-floor concrete loafing area with a non-slip surface finish.

- Bull selection criteria emphasises milk solids and fertility using the EBI system. This is the most appropriate approach for winter/liquid milk herds. The criteria for the bull panel are EBI at least €200, PD for milk protein% over 0.05%, milk kg +150kg to 200kg with good functional type (feet, udders, and body capacity). Bulls used this season include SOK, UPH, LLK, HZS and HYZ.

Weekly production sheet for week ending January 29th

Detailed Data Update to week ending: 29-JAN-12	
Feed System	
Genotype	Feed
Mean calving date of cows calved	10-OCT
Farmlet size (ha)	
Farmlet stocking rate (cows/ha)	
Production Data This Week	
Supplementation (kg/cow/day)	5.5
Milk Yield (kg/cow/day)	27.4
Milk Solids (kg/cow/day)	2.00
Fat Composition (%)	3.97
Protein Composition (%)	3.35
Lactose Composition (%)	4.77
Body Weight (kg)	473
Body Condition Score	
Cumulative Production to date	
Days in Milk (days)	116
Supplement fed (kg/cow)	552
Milk Yield (kg/cow)	3005
Milk Solids (kg/cow)	227
Milk Solids (kg/ha)	
Fat Composition (%)	4.17
Protein Composition (%)	3.39
Lactose Composition (%)	4.72

GRASS SILAGE ANALYSIS

Farmer: JCW PO/200210777
Sample Receive Date: 13/10/2011 *Return Date:* 17/10/2011 *Lab Reference:* SE38503

Item	Units	Desirable Values	Result	Status
Dry Matter	%	20 - 30	23.7	-
pH	-	4 - 4.7	4.1	Good
Ammonia N	% of Total N	< 10.1	6.8	Good
ASH	%	< 8.6	8.4	Good
NDF	%	< 45.0	46.90	Moderate
DMD	%	> 68.9	75.0	Good
ME	MJ/kg	> 9.8	10.8	Good
Crude Protein	%	13.5 - 17	14.4	Good

Item	Units	Normal Range	Result	Status
PDIN	g/kg	65 - 102	85	A
PDIE	g/kg	58 - 83	65	
PDIA	g/kg	16 - 37	26	
UFL	per kg	.65 - .90	0.85	
UFV	per kg	.59 - .89	0.81	
SFU	per kg	1.04 - 2.81	1.63	
LFU	per kg	.95 - 1.89	1.30	
CFU	per kg	.96 - 1.92	1.32	
DM Intake Cattle	g/kg $W^{0.75}$	70 - 130	102	
DM IntakeSheep	g/kg $W^{0.75}$	60 - 140	94	

PREDICTED PERFORMANCE
(silage ad lib no meals)

WITH GOOD MANAGEMENT

Lactating Cows (Litres/Day)	13.4
Dry Cows (Kg/Day)	0.8
Beef Cattle / InCalf Heifers (Kg day)	0.7
Weanling (Kg/Day)	0.5

SUPPLEMENTATION

Dairy Ration Protein %	18
Kg/Day for 27 litres	6.5
Beef Ration Protein %	13
Kg/Day for 1Kg/day Gain	4.00
Weanling Ration Protein %	14
Kg/Day for 0.6 Kg/day Gain	0.5

MAIZE SILAGE ANALYSIS

Lab Reference: ME81149

Item	Units	Normal Desirable Values	Result
Dry Matter	%	22.0 - 35.0	33.1
pH	-	3.5 - 3.9	3.8
ASH	%	3.2 - 4.5	4.1
NDF	%	42.0 - 55.0	51.60
Starch	%	20.0 - 28.0	31.6
ME	MJ/kg	10.5 - 11.5	11.7
Crude Protein	%	6.5 - 10	7.3

Concentrate ingredients (Coarse blend fed at 3kg per day at barrier)

Ingredient	**% as fed**
Beet pulp molassed	25
Soyabean meal 48% CP	25
Barley (rolled)	18
Maize	15.75
Rapeseed meal	14
Molasses	2
Post-calver 25kg/ton	0.25
Analysis	**(per kg as fed)**
DM, g	86.7
UFL	1.00
UFV	0.96
Crude protein %	22.5
PDIN, g	156
PDIE, g	132
Starch %	22.0
Crude fibre %	7.0
Oil %	1.8
Ash %	5.2

HERD EBI Johnstown Castle , January 2012

Data Extracted: 24/10/2011

1. EBI Herd Summary

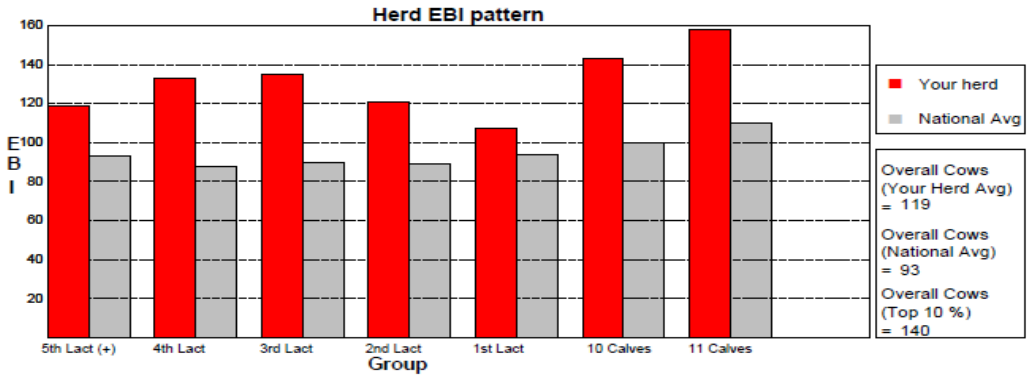
Average EBI for all dairy cows with; (i) a known sire (or milk recorded progeny with a known sire) and (ii) are currently on your farm.

* Missing Sires can be added through the 'Record Events' section of the HerdPlus website or by contacting the HerdPlus office - 1850 600 900

Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv%	Cl Days	Milk % Contrib	Fertility % Contrib	Calving % Contrib	Beef % Contrib	Mainten. % Contrib	Health % Contrib	EBI €
Cows with EBI	**118**	**178**					**€ 40**	**€ 68.7**	**€ 17.4**	**€ -8.1**	**€ 1.3**	**€ -0.2**	**€ 119**
Missing a Sire*	1	7.5	0.02	2.1			29.5%	50.6%	12.8%	-6%	1%	-0.1%	
Total Cows	119	7.7	0.04	-3.7									
1st Lactation	**45**	**213**					**€ 41.2**	**€ 58.1**	**€ 18.7**	**€ -11.5**	**€ 1.5**	**€ -0.6**	**€ 107**
		7.6	-0.01	1.7			31.3%	44.1%	14.2%	-8.7%	1.1%	-0.5%	
		8.4	0.03	-3.2									
2nd Lactation	**20**	**161**					**€ 38.3**	**€ 69.5**	**€ 20**	**€ -6.1**	**€ -0.9**	**€ -0.1**	**€ 121**
		8.7	0.05	2.2			28.4%	51.5%	14.8%	-4.5%	-0.7%	-0.1%	
		7.1	0.03	-3.6									
3rd Lactation	**17**	**154**					**€ 50**	**€ 77.2**	**€ 15**	**€ -9**	**€ 2.6**	**€ -0.4**	**€ 135**
		9.6	0.07	2.3			32.4%	50.1%	9.7%	-5.8%	1.7%	-0.3%	
		8.6	0.07	-4.2									
4th Lactation	**15**	**130**					**€ 32.3**	**€ 84.5**	**€ 19.5**	**€ -4.9**	**€ 1.9**	**€ -0.3**	**€ 133**
		6.2	0.03	2.5			22.5%	58.9%	13.6%	-3.4%	1.3%	-0.2%	
		6.0	0.03	-4.6									
5th Lactation (+)	**21**	**170**					**€ 36**	**€ 72.6**	**€ 12.8**	**€ -4.4**	**€ 1.5**	**€ 0.6**	**€ 119**
		5.3	-0.02	2.2			28.1%	56.8%	10%	-3.4%	1.2%	0.5%	
		7.4	0.03	-3.9									

2. Dairy Youngstock

11 Calves	**37**	**153**			**€ 49.3**	**€ 93.9**	**€ 22.3**	**€ -10.3**	**€ 0.6**	**€ 2.5**	**€ 158**
Missing a Sire*	0	9.6	0.07	2.6	27.6%	52.5%	12.5%	-5.8%	0.3%	1.4%	
Total Calves	0	8.5	0.07	-5.2							
10 Calves	**45**	**145**			**€ 52.3**	**€ 80.4**	**€ 20.9**	**€ -14.3**	**€ 2.7**	**€ 0.8**	**€ 143**
Missing a Sire*	0	9.8	0.09	2.2	30.5%	46.9%	12.2%	-8.3%	1.6%	0.5%	
Total Calves	37	8.9	0.09	-4.5							



Supplier Number: 350 / Manufacturing

Table 3: Wexford/ICBF Performance Score Card

	Your Herd	Wexford Average	Wexford Top 10%	Your Rank out of 100	Your Star Rating [1]
Milk performance for 2011 (Jan - Sep) based on Wexford data					
Fat + Protein (Kg/cow) Average Fat and Protein yield per cow for your herd	365	303	377	85%	* * * * *
Litres per Cow per Day Avg litres of Milk per cow from Jan - Sep 2011	17.05	14.84	18.1	80%	* * * *
Fat % to end September 2011 Weighted average Fat % from Jan - Sep 2011	4.1	3.94	4.14	86%	* * * * *
Protein % to end September 2011 Weighted average Protein % from Jan - Sep 2011	3.53	3.4	3.5	96%	* * * * *
Average Milk Price (cpl) Incl. VAT Average milk price received from Jan - Sep 2011, (Includes Bonuses/Penalties, Excludes Levies)	34.3	32.8	34.4	88%	* * * * *
SCC (,000 cells/ml) The weighted average Somatic Cell Count for Jan - Sep 2011	227	246	155	60%	* * *
Fertility & Calving data based on HerdPlus 2011 Calving Report					
Calving Interval (days) Average number of days between successive calvings for cows calved during the period	383	418	383	90%	* * * * *
Days to calve 50% of cows Start **01/02/2011** - Median **27/02/2011**	27	47	25	87%	* * * * *
Total Dairy Replacements Dairy Females born in the period **(43)** as a proportion of eligible cows **(104)**	41%	24%	41%	91%	* * * * *
%AI bred replacements %female calves born in the period from dairy AI **(43)** as a proportion of eligible cows **(104)**	41%	15%	33%	97%	* * * * *
EBI Statistics based on the latest HerdPlus EBI report 2011					
Herd EBI (2011) Average EBI for Cows **(101)** with EBI data	€ 101	€ 66	€ 91	97%	* * * * *
Yearly EBI Gain (2011-2012) Gain in Herd EBI based on; 0-1yr old, 1-2yr old & 22% replacement rate	€ 10	€ 6	€ 10	92%	* * * * *
EBI of 2011 Inseminations Weighted Average EBI of dairy AI bulls recorded in Summer 2011	n/a	€ 190	€ 226	n/a	

Table of Terms	
Wexford Average	The average performance of all Wexford Suppliers
Wexford Top 10%	The top 10% cut off point of all Wexford Suppliers
Your Rank out of 100	Your performance expressed across all Wexford herds eg. 1% = Bottom Supplier, 50% = Average Supplier 100% = Top Supplier
Your Star Rating	Your performance is displayed in stars e.g. 1 star is bottom 20% and 5 stars = top 20%
Eligible Cows	Number of dairy cows in the herd on September 2011

[1] * = 0 - 20% ** = 21 - 40% *** = 41 - 60% **** = 61 - 80% ***** = 81 - 100%