Johnstown Castle Weekly Farm Notes- November 18th

Introduction

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

- 70% autumn calving
- A mean calving date of October 8th for autumn calving. Calving commences in early September and continues until early December.
- A Holstein Friesian base with an EBI of €127 (see page 4). Aim is a 50:50 balance for milk and fertility

The herd produces approximately 40% of annual supply from October to February inclusive. This includes >10% 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 feed to yield ***(RED)*** group

Management Issues

- Feeding management- Forage quality and diet composition
- Pre breeding management - target >80% of cows submitted in first 21 days of breeding season
- End of grazing of grazing season
- Somatic cell and milk quality issues

Current Situation

- Current milk yield is at 27.5kg at 2.00kg milk solids and rising. Herd is at 50 days in milk (see table). Milk yield for the top 20% 37.5kg, and 21.1kg for the bottom 20%.

- Milk protein stands at 3.17%. Target milk protein for this stage of lactation is >3.30%, so this needs to be monitored closely. The herd is adjusting to full indoor diet conditions over the last week so this may have contributed to lower DMI. Diet and intakes will be adjusted next week if low milk protein persists.

- Cows are offered a base diet comprising

    - 3.5kg DM maize silage (see quality report below)
    - 5.5kg DM grass silage
    - 2.5kg DM of Trafford Gold
    - 2kg of coarse blend concentrate (0.94 UFL, 18% CP)
    - 2kg parlour-fed concentrate (0.94 UFL, 16% CP)

    - A further **0.5kg of parlour concentrate** per litre of milk is fed above a base yield of **22 litres**. This is capped at 10kg parlour feeding- therefore cows are covered for energy intake up to a yield of 40 litres. The mean meal feeding level above base is 3.3kg, which tracks 7-day average milk yield. The range of total concentrate feeding per cow per day in the herd is 4kg to 12kg.

- Total diet specification is as follows:

Dry Matter %	**36.6**
UFL /kg	**0.93**
Crude Protein %	**15.1**
PDIN g/kg	**96**
PDIE g/kg	**96**
Starch + sugar %	**18.5**
Oil %	**3.5**
Crude Fibre %	**20**
NDF %	**43**
ADF %	**26**

Total diet crude protein is kept relatively low at 15.1%, however PDIN and PDIE (measures of protein quality) are well balanced and provide enough protein to achieve 29-30 litres per cow at a 7kg meal feeding rate. The protein and energy levels in the diet are balanced to ensure that cows do not lose excessive body condition before breeding.

- Maize silage inclusion has been decreased, and Trafford Gold included in the diet, to balance a shortfall in both maize and grass silage stocks, which both suffered significant reductions due to poor weather in summer 2012. Also, 3kg straw plus 1.5kg meal is being fed to spring calving cows to stretch silage supplies

- Grazing finished on November 11th, heaviest pre-grazing cover remaining is 1100kg DM per ha. Closing cover is estimated at 690kgDM per ha.

- Breeding is scheduled to commence on December 15th. The ICBF bull selection programme was used to match bulls to cows (see below). Target

values for heifer progeny are +150 to +180 kg milk, over €100 for fertility and overall EBI over €160. ***This requires using a bull team of at least €200 average EBI***

Weekly production sheet for week ending November 18th

Detailed Data Update to week ending: 18-NOV-12	
Feed System	Au
Genotype	Feed
Mean calving date of cows calved	05-OCT
Farmlet size (ha)	
Farmlet stocking rate (cows/ha)	
Production Data This Week	
Supplementation (kg/cow/day)	5.3
Milk Yield (kg/cow/day)	27.5
Milk Solids (kg/cow/day)	2.00
Fat Composition (%)	4.12
Protein Composition (%)	3.17
Lactose Composition (%)	4.67
Body Weight (kg)	509
Body Condition Score	
Cumulative Production to date	
Days in Milk (days)	50
Supplement fed (kg/cow)	189
Milk Yield (kg/cow)	1192
Milk Solids (kg/cow)	87
Milk Solids (kg/ha)	
Fat Composition (%)	3.91
Protein Composition (%)	3.42
Lactose Composition (%)	4.58

HERD EBI Johnstown Castle

HerdPlus
Profit through Science

Economic Breeding Index (EBI) Herd Summary September 2012

LoCall 1850 600 900

Herd Owner: TEAGASC
Herd Number: IE3711764
Data Extracted: 10/07/2012

1. EBI Herd Summary

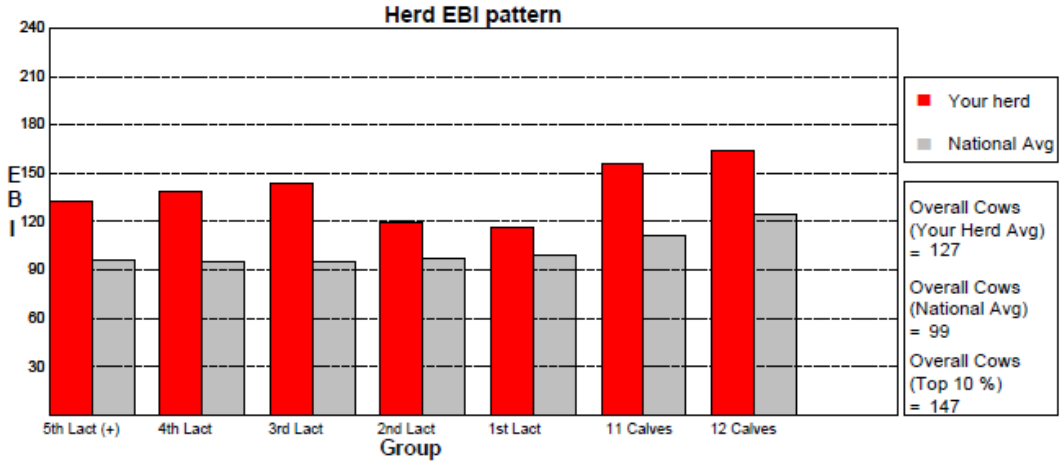
Average EBI for all dairy cows with; (i) a known sire (or milk recorded progeny with a known sire) and (ii) are currently on your farm.

* Number of animals that are missing an EBI result

Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv%	Calving Interval Days	Milk % Contrib	Fertility % Contrib	Calving % Contrib	Beef % Contrib	Mainten. % Contrib	Health % Contrib	EBI €
Cows with EBI	**112**	**186**					**€ 41.5**	**€ 75.3**	**€ 17.7**	**€ -8.7**	**€ 1.9**	**€ -1**	**€ 127**
Missing EBI*	0	7.9	0.02		2.2		28.4%	51.5%	12.1%	-6%	1.3%	-0.7%	
Total Cows	112	8.0	0.04		-4.1								
1st Lactation	**40**	**229**					**€ 43.2**	**€ 65.3**	**€ 19.1**	**€ -12.2**	**€ 2**	**€ -1.6**	**€ 116**
		8.5	0.00		1.8		30.1%	45.5%	13.3%	-8.5%	1.4%	-1.1%	
		8.8	0.03		-3.7								
2nd Lactation	**22**	**180**					**€ 40.7**	**€ 68.5**	**€ 18.8**	**€ -8.6**	**€ 1.1**	**€ -1.2**	**€ 119**
		8.0	0.02		2.1		29.3%	49.3%	13.5%	-6.2%	0.8%	-0.9%	
		7.8	0.04		-3.6								
3rd Lactation	**18**	**125**					**€ 44.3**	**€ 89.8**	**€ 16.4**	**€ -6.5**	**€ 1.8**	**€ -1.1**	**€ 144**
		10.1	0.10		2.7		27.7%	56.2%	10.3%	-4.1%	1.1%	-0.7%	
		7.3	0.06		-4.9								
4th Lactation	**12**	**158**					**€ 37.5**	**€ 85.5**	**€ 19.5**	**€ -7.2**	**€ 4.2**	**€ -0.5**	**€ 139**
		5.8	0.00		2.6		24.3%	55.4%	12.6%	-4.7%	2.7%	-0.3%	
		7.3	0.04		-4.6								
5th Lactation (+)	**20**	**178**					**€ 38.8**	**€ 83.7**	**€ 13.6**	**€ -4.9**	**€ 1.4**	**€ 0.4**	**€ 133**
		6.0	-0.01		2.5		27.2%	58.6%	9.5%	-3.4%	1%	0.3%	
		7.8	0.04		-4.5								

2. Dairy Youngstock

12 Calves	**7**	**136**			**€ 53.2**	**€ 100.2**	**€ 20.3**	**€ -15.8**	**€ 3.7**	**€ 2.7**	**€ 164**
Missing EBI*	0	10.7	0.11	2.6	27.2%	51.1%	10.4%	-8.1%	1.9%	1.4%	
Total Calves	7	8.7	0.09	-5.8							
11 Calves	**36**	**160**			**€ 51.7**	**€ 94.3**	**€ 22.1**	**€ -13.2**	**€ -0.2**	**€ 1**	**€ 156**
Missing EBI*	0	10.0	0.08	2.5	28.3%	51.7%	12.1%	-7.2%	-0.1%	0.5%	
Total Calves	36	9.0	0.07	-5.4							



Bull Selection Report 2012

HerdPlus
Profit through Science

ICBF.com

ICBF Sire Advice

1850 600 900

Name TEAGASC
Designator IE3711764
Print Date 07-NOV-2012

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)	Hlth (E)	M Kg	F Kg	P Kg	F+P Kg	F %	P %	CI days	SU %
All Cows in Herd	**127**	42	75	18	-9	-1	186	7.9	8.0	15.9	0.02	0.04	-4.1	2.2
Predicted 2012 Calves	**175**	57	101	27	-14	0	184	11.8	9.8	21.6	0.09	0.08	-5.5	3.0
Bulls Weighted Averages	**223**	72	126	36	-18	1	182	15.7	11.6	27.3	0.16	0.11	-6.9	3.7

Note: Predicted EBI & PTA's of 2012 born calves assume cows are mated with Bulls from Bull 1 column

Bulls selected for use in your herd

				EBI Sub Index					PTA's									
Bull	Name of Bull	EBI (E)	No of Straws	Milk (E)	Fert (E)	Calv (E)	Beef (E)	Hlth (E)	M Kg	F Kg	P Kg	F+P Kg	F %	P %	CI days	Su %	Pr (E)	Supplier
AWB	(IG) BALLINTOSIG ANDREW	219	31	57	139	28	2	3	289	10.1	11.6	21.8	-0.02	0.04	-6.7	5.0	19	NCBC,Munster,PG
BHZ	BALLYBROOK ASHLING JUS	201	17	79	112	31	-25	-6	138	10.0	13.0	23.0	0.09	0.16	-6.7	2.7	19	NCBC,Munster,PG
LHZ	(IG) LAURAGH EVERT	266	21	77	162	28	-16	-7	11	11.6	10.5	22.1	0.21	0.20	-8.9	4.7	19	NCBC,Munster,PG
HMY	HIGHMOUNT KENNY	196	30	72	87	44	-17	-1	27	24.5	8.0	32.5	0.45	0.14	-4.9	2.5	18	NCBC,Munster,PG
TSK	(IG) KNOCKCAIS TOSSY	216	20	59	123	37	-24	8	116	12.2	9.1	21.3	0.14	0.10	-7.3	3.1	18	NCBC,Munster,PG
GJM	GRAN-J OMAN MCCORMICK	191	19	72	109	34	-32	11	338	18.3	13.5	31.8	0.10	0.04	-7.5	1.7	28	ABS
DGC	DUNGOURNEY CREMIN	262	31	87	148	45	-26	1	312	19.4	15.3	34.7	0.13	0.09	-7.3	5.1	17	Dovea AI