Johnstown Castle Winter Milk Herd- Weekly Management Notes

04/11/15

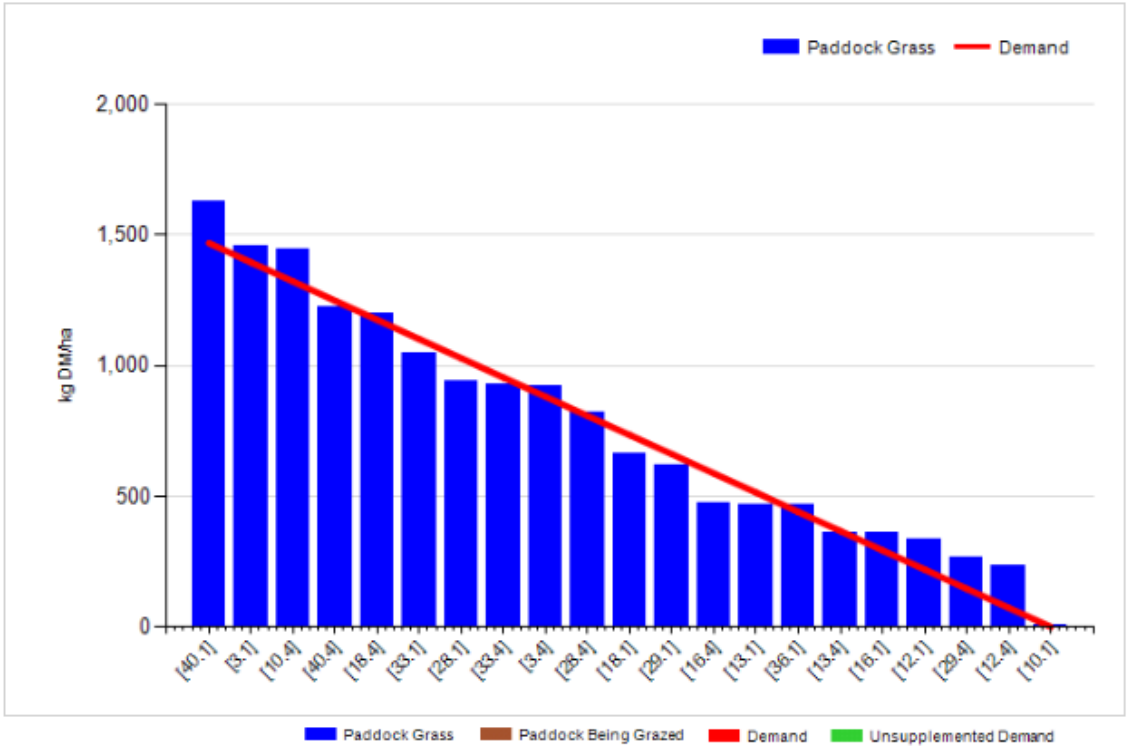
Group: Teagasc Dairy Research Farms	Cover Date: 04/11/2015
Farm: Johnstown Dairy	Treatment: 1

Management Decisions

Rotation Length (days):	40	Silage Fed (kg DM/cow):	3.0
Grass Allocation/Cow (kg DM/cow):	12.0	Residual Height (cm):	4.0
No. of Cows:	46		
Concentrate Fed (kg/cow):	4.0		

Cover Parameters

Grass Allocation/LU (kg DM/LU):	12.0	Growth Rate:	31
Total Livestock (LU):	52.0	Farm Demand (kg DM/ha/day):	37
Farm Cover (kg DM/ha):	760	Target Pre-grazing yield (kg DM/ha):	1469
Farm Cover (kg DM/LU):	248	Days Ahead:	21
Stocking Rate (LU/ha):	3.06	LW/ha (Liveweight/ha):	205



Management Comments

- Rainfall of 41.9mm & soil temp of 11 .3°C for last week. Very mild the past few days, but grazing conditions are only just ok. Exceptional Growth for time of year - 31kg/dm/ha
- 82% of ground closed at the moment, which is pretty much on target. For the past week we've been housing cows, four hours after their evening milking (21.00), this allowed us to maintain grazing pressure ~12kgs/DM/grass/cow/day, whilst avoiding any possible damage to paddocks. We restricted the indoor feed to a very small 3kg/DM of baled silage, so the cows had a sharp appetite for grazing.
- We plan to house by night within the next 5 days, especially if weather breaks again, we would have approx. 8 days grazing by day after that. As of now all the heavy covers have been taken out & were back to a nice pre-grazing of ~1500kgs/DM.

- Maize silage has been harvested and quality seems to be very good. This is grown on contract, where we buy a set amount of tons @ a base price for maize testing between 24-28% for both starch & dry matter, quality bonus above this figure & penalty for below.
- See below for some results of silage analysis, yet again we failed to meet our target for main 1st cut pit silage to come in at >75DMD, but we're not far off it, target cutting date was 14/05/15 & actual cut date was 21/05/15, this will be the grass silage for winter milking cows . There may be some variation in the surplus bales, but overall quality should be very good, we'll use some of these when housing by night in the next week or so, until such time as maize is available. We also plan to keep some good quality bales for next spring, for periods of grass deficit/poor grazing conditions. The final sample is from this year's second cut silage, which initially suffered a mini drought in June & then had harvest date delayed due to weather in July, we'd still be happy with this silage to feed to Dry spring calving cows & replacement heifers.

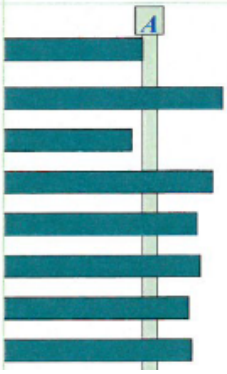
Milk production and feed details

	Autumn Calving Section	Spring Calving Section
This Week (02/11/15) – cows in milk		
Milk Kg	26.2	18.6
Fat %	4.25	3.99
Protein %	3.55	4.13
Milk Solids kg	2.04	1.50
Parlour concentrate (kgs)	4	4
Silage kg dry matter per cow	3	3
Grazed grass kg cow	12	12
% of Herd Milking	79	100
Lactation to date		
Days in Milk	41	245
Milk kg	910	6073
Milk Solids kg	79	465
Concentrate Fed	120	476kg parlor & 105kg tmr

First Cut Silage - Pit

Item	Units	Desirable Values	Result	Status
Dry Matter	%	20 - 30	28.5	-
pH	-	4 - 4.7	4.2	Good
Ammonia N	% of Total N	< 10.1	8.3	Good
ASH	%	< 8.6	9.1	Moderate
NDF	%	< 45.0	45.80	Moderate
DMD	%	> 68.9	73.7	Good
ME	MJ/kg	> 9.8	10.6	Good
Crude Protein	%	13.5 - 17	14.0	Good

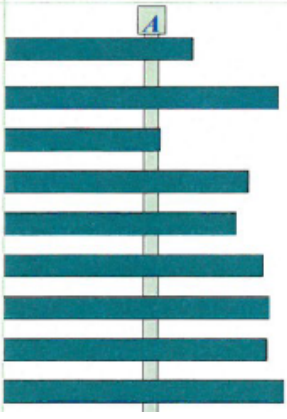
Item	Units	Normal Range	Result	Status
PDIN	g/kg	65 - 102	83	
PDIE	g/kg	58 - 83	77	
PDIA	g/kg	16 - 37	25	
UFL	per kg	.65 - .90	0.83	
UFV	per kg	.59 - .89	0.79	
SFU	per kg	1.04 - 2.81	1.61	
LFU	per kg	.95 - 1.89	1.29	
CFU	per kg	.96 - 1.92	1.30	



Surplus Baled silage

Item	Units	Desirable Values	Result	Status
Dry Matter	%	20 - 30	42.0	-
pH	-	4 - 4.7	4.9	Moderate
Ammonia N	% of Total N	< 10.1	13.2	Moderate
ASH	%	< 8.6	9.8	Moderate
NDF	%	< 45.0	44.20	Good
DMD	%	> 68.9	76.0	Good
ME	MJ/kg	> 9.8	11.0	Good
Crude Protein	%	13.5 - 17	15.0	Good

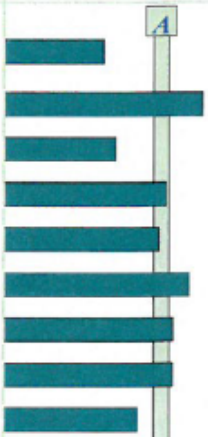
Item	Units	Normal Range	Result	Status
PDIN	g/kg	65 - 102	89	
PDIE	g/kg	58 - 83	82	
PDIA	g/kg	16 - 37	27	
UFL	per kg	.65 - .90	0.86	
UFV	per kg	.59 - .89	0.83	
SFU	per kg	1.04 - 2.81	1.23	
LFU	per kg	.95 - 1.89	1.03	
CFU	per kg	.96 - 1.92	1.05	
DM Intake Cattle	g/kg $W^{0.75}$	70 - 130	128	



Second cut silage - Pit

Item	Units	Desirable Values	Result	Status
Dry Matter	%	20 - 30	24.3	-
pH	-	4 - 4.7	4.1	Good
Ammonia N	% of Total N	< 10.1	5.8	Good
ASH	%	< 8.6	9.0	Moderate
NDF	%	< 45.0	49.60	Moderate
DMD	%	> 68.9	69.9	Good
ME	MJ/kg	> 9.8	10.0	Good
Crude Protein	%	13.5 - 17	13.0	Low

Item	Units	Normal Range	Result	Status
PDIN	g/kg	65 - 102	77	
PDIE	g/kg	58 - 83	74	
PDIA	g/kg	16 - 37	24	
UFL	per kg	.65 - .90	0.78	
UFV	per kg	.59 - .89	0.74	
SFU	per kg	1.04 - 2.81	1.76	
LFU	per kg	.95 - 1.89	1.38	
CFU	per kg	.96 - 1.92	1.40	
DM Intake Cattle	g/kg $W^{0.75}$	70 - 130	96	



Replacement Weights

Group	Autumn Born 2013 D.O.B: *8/10/13* Avg EBI: *206*	Spring Born 2014 D.O.B: *25/02/14* Avg EBI: *205*	Autumn Born 2014 D.O.B: *3/10/14* Avg EBI: *221*	Spring Born 2015 D.O.B: *17/02/15* Avg EBI: *230*
Birth	38	39	39	36
28-May-14	216			
22-Jul-14	284	155		
22-Sep-14	335	226		
11-Dec-14	377 (breeding)			
6-Feb-15		297		
21-Apr-15	468	391 (breeding)	186	
28-Jul-15	562	471	288	158
31-Aug-15	597	518	317	191
30-Sep-15		549	351	220
3-Nov-15		577	376	245