



INGREDIENTS  
IRELAND

# Teagasc/Glanbia (GII) Monitor Farm Walk

*Financial and Infrastructure Planning  
on Expanding Farms*

**Tuesday, 5<sup>th</sup> April | 11am**

**Shane O'Loughlin, Oghill,  
Monasterevin, Co. Kildare**

*Topics for discussion include:*

- Long term planning
- Current cashflow management
- Planning good farm infrastructure
- Improving submission rate



# TEAGASC/GLANBIA MONITOR FARM WALK

<b>Farmer</b>	Shane O' Loughlin	<b>Date</b>	
<b>Adviser</b>	Ned Loughlin		

Short Term Goals	Long Term Goals
Grow more grass	Milk 240 cows
Increase milk solids sold	New milking parlour required
Build replacement heifer accommodation	

Farm Details		Stock Details		Today
Land owned (ha)	57	Dairy cows		180
Land farmed (ha)	156	Replacements 0-1yr		61
		Replacements 1-2 yr		60
Milking platform (ha)	64	Replacements 2 yr+		
Cows/milking platform ha	2.8	Other cattle 0-1yr		
Overall stocking rate	1.67	Other cattle 1-2yr		
		Other cattle 2yr+		20
		Total LU		260
		Stocking rate (LU/ha)		1.67
		Organic N (kg/ha)		138

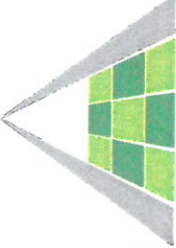
Costs & Profits 2015	c/l	Average	Breeding & Fertility	2016		
Average co-op milk price	34.9	31.2		<b>Cows</b>	<b>Repl 9+</b>	<b>Repl 0 - 9</b>
Total Dairy Output	35.26	32.09	No.	200	48	68
			EBI (€)	149	201	212
Feed	3.42	3.82	Milk SI (€)	37	56	59
Fertiliser	2.09	2.58	Fertility SI (€)	84	108	119
Vet	1.14	1.09				
AI	0.95	0.57				
Contractor	1.48	1.6	Calving start date	<b>Cows</b>	<b>Heifers</b>	
Other Variable Costs			Calving spread (weeks)	27-Jan	27-Jan	
Total Variable Costs	12.07	11.57	6 week calving rate (%)	13	13	
				82	90	
Machinery	1	1.32	Submission rate (%)	80	95	
Car, ESB, Phone	1.02	1.23	Empty rate (%)	9	5	
Depreciation	1.24	1.79				
Other Fixed Costs						
Total Fixed Costs	11.34	8.75	<b>Bulls 2016</b>	<b>EBI (€)</b>	<b>Milk/Fert</b>	
			FR2245, FR2274, FR2244, FR2273,	381	115/215	
Total Costs	23.41	20.32	FR2315, FR2317, FR2275, FR2238			
Net Profit	11.85	11.77	SEW,YAD,MKK			
Net Profit per cow €	714	646				

## Current performance

Milk production	2015	Today		Grassland Management	Today	Target
Milk yield (litres/cow)	6025	27.65		Average farm cover (kgDM/ha)	409	550
Milk protein %	3.5	3.32		Pre-grazing yield (kgDM/ha)	1200	1400
Milk fat %	4.15	3.92		Rotation length (days)		20
Milk solids/cow (kg/day)	475	2.06		Demand (kgDM/ha)	20	42
SCC ,000 cells/ml	123	142		Fertiliser use (kgN/ha)	95	95

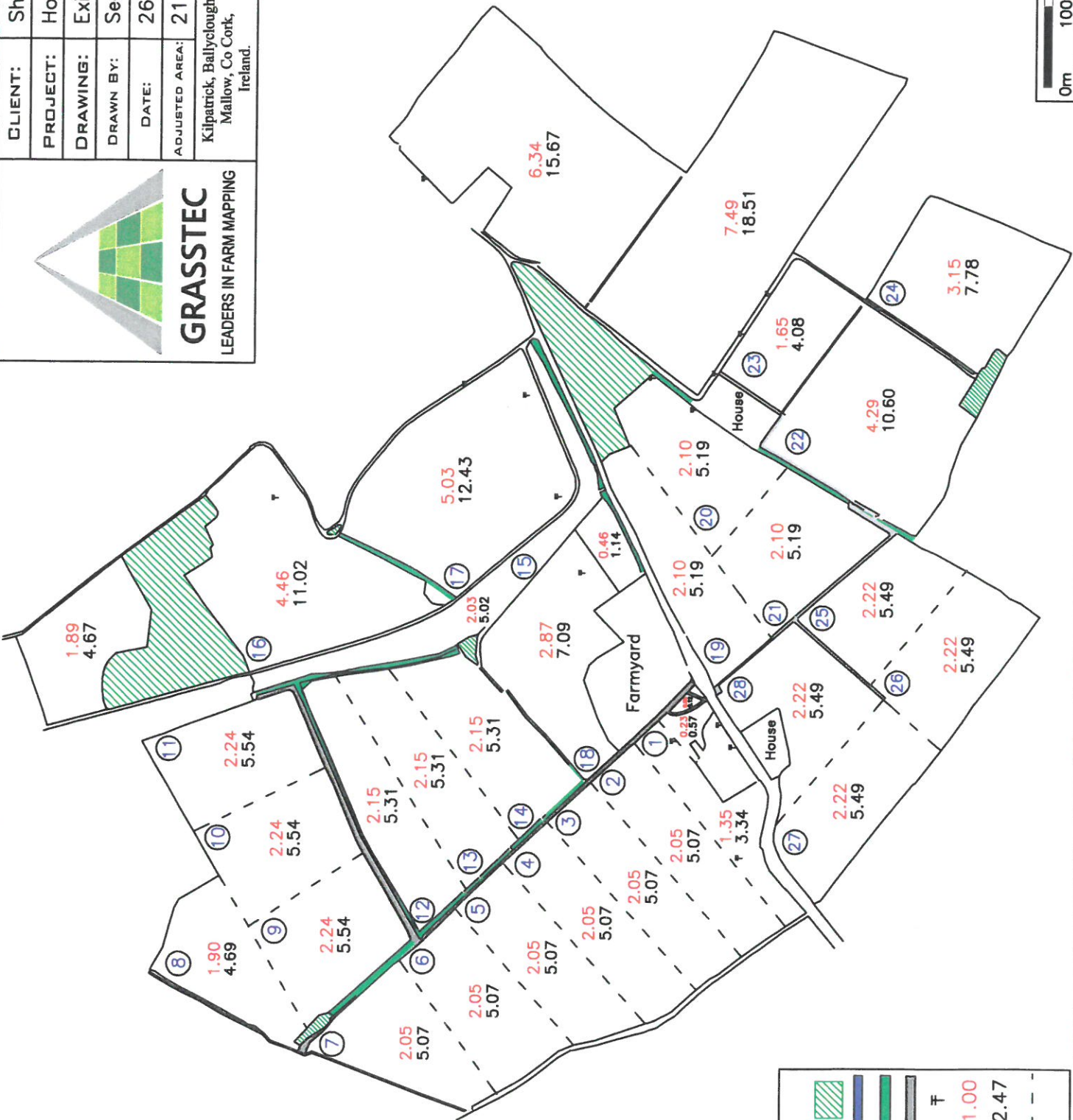






**GRASSTEC**  
LEADERS IN FARM MAPPING

CLIENT:	Shane O'Loughlin
PROJECT:	Home Farm
DRAWING:	Existing Farm Map
DRAWN BY:	Seamus Martin
DATE:	26-01-2015
ADJUSTED AREA:	211.25ac / 85.49ha
Kilpatrick, Ballyclough, Mallow, Co Cork, Ireland.	
Tel: +353 22 27610 E-mail: <a href="mailto:info@grasstec.ie">info@grasstec.ie</a> Web: <a href="http://www.grasstec.ie">www.grasstec.ie</a>	



**LEGEND**

Trees	Water	Hedges	Roadways	ESB Poles	Hectares	Acres	Paddock Wires
					1.00	2.47	



# Financial Planning

	2015	2018	2021
<b>Ha Farmed</b>	156	156	156
<b>Cow No.</b>	175	220	240
<b>S.R. (Overall/Platform)</b>	1.46/2.73	1.85/3.44	1.91/3.75
<b>Grass growth (kgdm/ha)</b>	13.15	14.5	15
<b>Six week calving rate%</b>	66	90	90
<b>MS/Cow kg (Fat/Protein %)</b>	478 3.5/4.15	500 3.6/4.42	511 3.7/4.5
<b>Milk Price c/l</b>	34.9	33.5	34.2
<b>Total Receipts</b>	428,934	511,194	570,180
<b>Total Payments</b>	415,596	470,037	504,951
<b>Net Cash Flow €</b>	13,338	41,157	65,229



## Cash Flow Estimate for 2016

	2015	Est. 2016	Change
<b>Physical</b>			2015-2016
Area farmed			
Dairy platform			
Cows milked			
Milk sales (litres)			
Milk price (c/litre)			
<b>Cash sales</b>			
Milk sales	€ -	€ -	
Stock sales			
Other sales			
<b>Total sales</b>	€ -	€ -	
<b>Variable costs</b>			
Feed			
Fertiliser			
Vet+AI			
Contractor			
Other var. costs			
<b>Total VC</b>	€ -	€ -	
<b>Fixed costs</b>			
Labour			
Machinery			
Interest			
Car/ESB/phone			
Repairs			
Other FC			
<b>Total FC</b>	€ -	€ -	
<b>Cash surplus</b>	€ -	€ -	

## Grazing Infrastructure

- Proper designed road network essential
- Road location should be influenced by:
  - increasing access to paddocks
  - Cow flow to parlour
- Must consider future herd size
- And Location of Grazing platform



## Width of Road

- Avoid 90 degree turns – it can cause bottlenecks
- Use swept bends where possible
- Create the widest section nearest the milking parlour
  - Herd size <80cows – 4-5m road width
  - Herd size <120 cows – 5m road width
  - Herd size 120-250cows – 5.5m road width
  - Herd size <250 cows – 6m road width
  - Roads too narrow – cows push in creating lameness
  - Keep fence 45cm from the edge of the road.

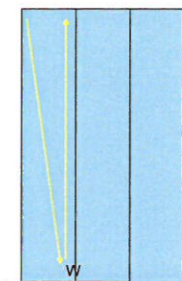


## Paddock Layout

- Square paddocks work best - it minimises damage due to less walking
  - 1:2 ratio for width/length
  - Eg 150 m wide and 300m long
- Create multiple entries into paddock
- Centralise water in paddock.
- Create shallow paddock for early spring grazing



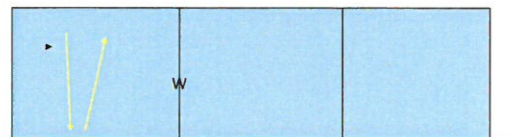
## Paddock Layout



- Traditional
- Long narrow paddocks
- More damage due to increased walking
- Water usually at gap
- Limited access points



## Paddock Layout



- Square paddock as best you can
- Centralise water
- Less walking – less damage
- Easier strip in Spring/Autumn
- Multiple access points possible



## Paddock size

- Paddock size will vary with cow numbers
- For best cow performance use 36 hour paddocks for mid season grazing
- Small paddocks can impact on cow performance and grazing management.
- Most paddock systems on farms are designed for a smaller number of cows.



## Paddock Size

- Number of cows x daily grass allowance x 1.5  
Available pregrazing yield
- Eg: 120 cows on full grass  
 $\frac{120 \times 18 \times 1.5}{1,300} = 2.49\text{Ha}$



## Water

- Cow water intake
  - 10litres on cold wet days
  - Up to 90 litres on hot sunny days
  - Cow drinks up to 14 litres(3gallons) per minute, 30-50% within one hour of milking
  - Locate troughs centrally in paddocks
  - Looped system system will increase flow rate



## Water

- **Calculating water flow rate**
- Assuming a daily demand of 80 litres per cow, almost 50% of which is consumed in a three hour period soon after evening milking, means that an hourly flow rate of 13 litres per cow per hour is required (i.e.  $80 \times 50\% / 3 = 13$  litres/cow/hour.). Therefore, for a herd of 100 cows the flow rate needs to be about:  $100 \text{ cows} \times 13 \text{ litres/hour} = 1300 \text{ litres/hour}$  or 22 litres per minute.



## Water

- Allow 450mm (18 inches) drinking space per cow so that close to 10% of your herd to drink at the same time
- Troughs under wires can reduce feed space
- Allow 9l/cow (2 gallons) storage in the field
- Pipe Size critical to flow rate
  - Smaller pipes create more friction reducing flow rate





## Glanbia Bulk Milk Disease Screening Service

Shane O'Loughlin Farm Ltd

Oghill

Monasterevin

Co Kildare

Co Kildare

Sample ID

7215324

Herd Number

11630851

Farm Dev. Advisor

Dan O' Dwyer

Vet

Keating & O'Connor MRCVS

### Vaccination Status

IBR	BVD	LEPTO	Salmonella
No	Yes	Yes	Yes

## SUMMARY RESULTS REPORT

Disease	Test Method
IBR gB (Non Vaccinating Herd)	ELISA (Antibody)
IBR gE (Vaccinating Herd)	ELISA (Antibody)
Leptospirosis	ELISA (Antibody)
BVD Antibody	ELISA (Antibody)
Neospora	ELISA (Antibody)
Salmonella	PCR/ELISA (Antigen)
Salmonella	ELISA (Antibody)
Ostertagia (Stomach Worms)	ELISA (Antibody)
Fasciolosis (Liver Fluke)	ELISA (Antibody)

Date	19/03/16	Grade
Result Reading	4.058	NEG
	0.128	POS
	45.618	LPOS
	0.098	NEG
	158.6	POS
	0.68582	LPOS
	7.311	NEG

Date	28/11/15	Grade
Result Reading	0.738	NEG
	0.176	POS
	38.645	HPOS
	0.205	NEG
	ELISA (Antigen)	NEG
	0.5801	LPOS
	4.945	NEG

Date	12/09/15	Grade
Result Reading	15.429	NEG
	0.181	POS
	41.851	HPOS
	0.165	NEG
	ELISA (Antigen)	POS
	0.8597	HPOS
	4.516	NEG

Date	12/06/15	Grade
Result Reading	0.922	NEG
	0.158	POS
	20.080	HPOS
	0.068	NEG
	ELISA (Antigen)	NEG
	0.52637	LPOS
	3.461	NEG

COMMENT: Where cows/herds are currently vaccinated for BVD, IBR, Lepto; results for these tests may be affected by vaccination. Results are representative of milking cows whose milk is in the bulk tank at the time of sampling and relate only to the portion of the sample tested. All results should be discussed with your Veterinary Practitioner. Antibody levels indicate previous exposure to disease and/or vaccine. Positive results on antigen tests indicate the presence of that infectious disease in the milk sample.



## Breeding Plan 2016

Date: \_\_\_\_\_



	Target		Actual	
No. of cows and heifers to be served	Cows	Heifers		
No. of heifers required in 2019				
No. of dairy AI straws needed	5.5 straws/repl.			
Aids to heat detection to be used				
Planned start of calving, 2017				
Start of pre-service heat detection	3 weeks before start of AI			
Start of AI (maiden heifers)	1 week before cows			
Start of AI (cows)				
Submission rate – 3 weeks	90 %		%	
Cows served in Week 1 (%)	No.	30 %	No.	%
Cows served in Week 2 (%)	No.	30 %	No.	%
Cows served in Week 3 (%)	No.	30 %	No.	%
Examination of non-cycling cows	9 weeks after start of AI			
Change to beef AI/ beef stock bull	All dairy AI straws used			
End of breeding season	13 weeks after start			

Bulls to be Used				
	Target		Actual	
	AI Code	No. of straws	AI code	No. of straws
Bull 1				
Bull 2				
Bull 3				
Bull 4				
Bull 5				