

Sheep Farm Walk
July 13th 2016
Farm of David & Linda McLaughlin
Ballymacarthur, Greencastle,
Co. Donegal



A Knowledge Transfer Qualifying Event

Introduction

I welcome you to today's event where you will hear how David and Linda McLaughlin and other farmers in the Sheep BETTER farm Programme have made changes that have improved their efficiency and Gross Margin since joining the Programme in 2008. David operates a Hill and Lowland sheep enterprises as well as a suckler beef enterprise. At today's event the focus is on the lowland flock where the objective has been to develop a highly productive sustainable grass-based system of prime lamb production. About 70% of flocks nationally having less than 100 ewes, therefore the McLaughlin lowland flock is reflective of the majority of the flocks in the industry and in Donegal. It is an ideal opportunity to see at first hand the potential for similar flocks to develop a high output grass-based system of production.

There are 4 stands which will discuss:

1. Flock performance,
2. Grassland management,
3. Soil fertility and
4. Reseeding.

Each of these stands will provide you with an opportunity to engage with the speakers on a variety of topics. This is a national qualifying event for the Knowledge Transfer Programme (KT) and we would encourage participants to ensure they register with the Department of Agriculture, Food and the Marine at the event.

May I conclude by thanking the McLaughlin family for their continued participation in the Sheep BETTER farm programme and opening their farm again today.

Ben Wilkinson,

Regional Manager, Sligo, Leitrim and Donegal

Farm Details

- **Farm layout: 3 main blocks**
 - Out farm 17 ha – Lowland block
 - Home farm 9.5 ha
 - Hill Farm 20 ha green land & 85 ha of hill
- **Farm system**
 - Mixed grazing Sheep & Suckler cows

- **Sheep enterprise**
 - Lowland flock 78 ewes + replacements
 - Ewe breeds: Mule, Belclare crosses & Texel-crosses
 - Sire breed: Texel
 - Lambed 17th March onwards
 - Hill flock 260 ewes + replacements
 - Lambed 5th April onwards
- **Beef enterprise**
 - 15 Autumn calved suckler cows + followers
 - AI plus natural service
 - Calves sold at 10 months

Farm Plan – Key elements

- Develop an all in all out system
- Finish all lambs produced in the lowland flock off grass.
- Produce replacements from the hill flock
- Belclare crosses & Mules
- Draft Scotch Blackface ewes for 1 lamb crop
- Maintain high levels of output
- **Improve grassland production with emphasis on**
 - Autumn closing date, grazing management, reseeding
 - Weekly walk & grass measuring from April (Pasturebase)
 - Soil fertility
- **Winter management**
 - Housing policy
 - Winter shearing
 - Late pregnancy nutrition

Flock Performance

Table 1. Performance of lowland flock in 2009 and 2015

	2009	2015
No ewes mated	59	81
Litter size	1.87	2.25
Ewes lambled (%)	91.5	94.4
Lamb mortality (%)	4.1	6.5
Lambs weaned per ewe joined	1.59	1.99
Total lambs weaned	94	164

- Focused on improving output
 - Target to wean in excess of 1.7 lambs weaned per ewe joined
 - Producing prolific replacements (breeding policy)
 - Improved management
- Flock output 2009 vs. 2015
 - Extra 60+ lambs weaned
 - Extra 1200+ kg of lamb carcass produced = current value of €6000 approx.
- Combined effects:
 - Increased output per ewe
 - Increase in ewe numbers



Lamb Performance

- Grass based system of production
- High levels of lamb performance improving each year

Table 2. Average lamb carcass weight (kg) during the past 7 seasons

Year	Weight
2009	19.9
2010	19.7
2011	20.3
2012	19.9
2013	19.7
2014	19.6
2015	20.5

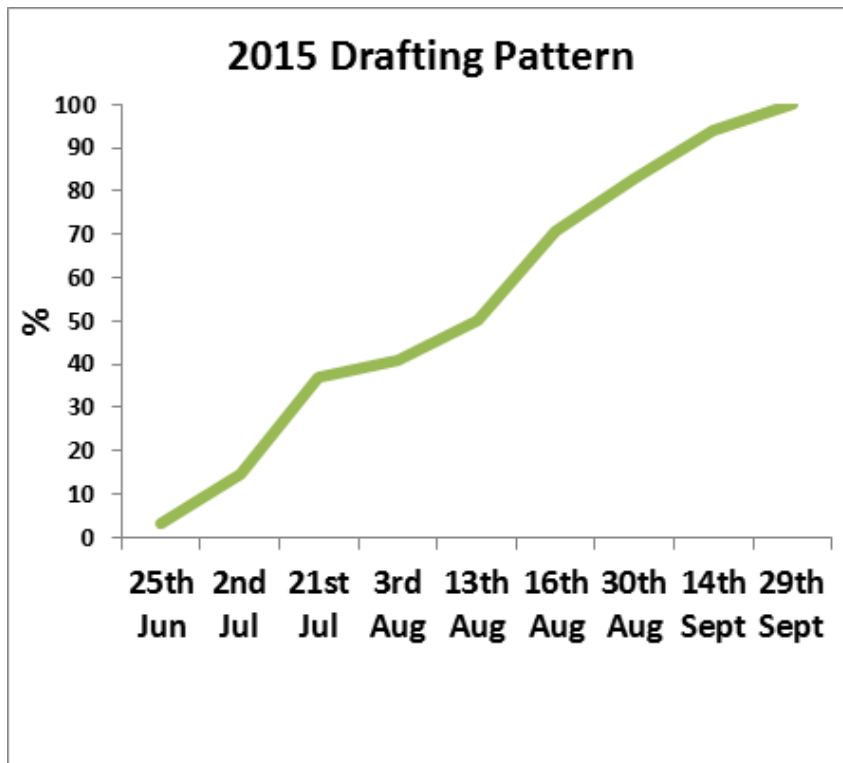


Figure 1. Lamb drafting pattern (%) for 2015

Parasite control

- Mixed grazing system – Lower worm lamb burden
- Ewes treated for nematodes (stomach worms) at turnout Macrocylic Lactone (3-ML)
- Nematodirus infection treated in late April/early May with product from (1-BZ) (Benzimidazole/white drench) group - lambs aged 5 to 7 weeks
- Worm burdens monitored using faecal egg counts
- Dung samples collected from lambs at fortnightly intervals from late May
- Subsequent anthelmintic treatments are based using Macrocylic Lactone (3-ML)
- No resistance issues Macrocylic Lactone (3-ML)
- Fluke control:
 - Flock dosed in September (pre-mating) with Triclabendazole-based product
 - Subsequent treatment in late December (post housing) with Closantel-based product



Flock health

- Clostridial diseases
 - Replacement ewe lambs receive initial vaccine in September and booster 4-6 weeks apart in September
 - Ewes receive annual booster 4 weeks pre lambing
- Lameness
 - All sheep are foot bathed using formalin
 - Problem individuals are treated with an antibiotic.
- Orf
 - Had not been a major issue in previous years
 - 2012 Problem with an number of lambs
 - 2013 ewes vaccinated – severe issue with a number of lambs
- Blowfly: Topical application used on ewes and lambs in summer
- Ewes dipped in autumn each year

Breeding policy

- All-in all-out system – all lambs sold from the lowland flock
- Replacements produced from Hill flock from 2010 onward
- Belclare & Bluefaced Leicester rams used to generate replacements
 - Belclare only from 2015
- S.Blackface ewes drafted into lowland flock to produce 1 lamb crop in previous seasons
- Texel rams used on lowland flock produced from small pedigree flock
 - Single sire mating used for limited period to facilitate genetic evaluation
 - Contributing to sheep Ireland Recording system



Financial Performance

Table 3. Financial Performance lowland flock 2015 €/Hectare

Gross output	2190
Total variable costs	858
Gross margin	1332

- Gross margin – top 10% of flocks in E-PM
- How is it achieved?
 - High output – main driver of profit
 - Productive ewes
 - Good stocking rate
 - Managing costs
 - Getting more from grass
 - Targeted supplementation - triplets

Soil Fertility

The first priority in improving grassland production should always be to improve the soil pH and fertility by the use of Ground Limestone, phosphate and Potassium.

David has been working to a Lime and Fertiliser Plan since 2009

Soil Analysis 2014	Details of Reseeded Field 22
Soil pH – 6.1	Recommended: 1.5 tonnes/hectare = 0.6 tonnes/acre.
Phosphorus – 2.79ppm	Index 1 – 24 units P/acre/year advised for grazing
Potassium – 100ppm	Index 2 – 36 units K/ acre/year advised for grazing

Reseeding

Reseeding is an integral part of improving grassland. Since the sheep BETTER farm programme began David has re-seeded Field 23 (A & B) in 2011, Field 27 in 2015 and Field 22 recently on July 4th 2016. This field has given very poor grazing performance every year. Although he would normally plough to reseed it was decided to do use a ‘min-till’ system in 2016 in order to highlight the correct steps when using such an approach. Regardless of the method used the use of post emergence herbicide spray 5-6 weeks after sowing is a crucial step.



Reseeding Steps 2016

1. 3rd grazing completed on 10th June
2. Grass allowed re-grow until 18th June.
3. Field burned off using Glyphosate @ 2l/acre. on 18th June.
4. Field grazed 3 days later on 21st June and stock removed on 25th June.
5. Ground Limestone spread on June 30th @ 2 tonne/acre
6. Field topped on 30th June
7. Field reseeded on July 4th using a 'Direct Drill' – 'Erth Engineering Agriseeder'.
8. Fertiliser used 200 kg 10.10.20/acre on 5th July
9. Grass seed used – Inishowen Co-op No. 4 Mixture with an additional 1.5 kg. White Clover added per acre pack. 4 packs sown on 3 acres.
10. Proposed to use a post emergence spray such as legume approx. 5-6 weeks post sowing.

Grass Seed Mixture 2016

4.50 kg. Aberchoice - Late Heading Diploid Perennial Ryegrass

3.50 kg. Abergain - Late Heading Tetraploid Perennial Ryegrass

3.50 kg. Drumbo - Late Heading Diploid Perennial Ryegrass

2.00 kg Aberherald - White Clover - Medium leafed variety

Total Mix = 13.5 kg.

Teagasc Pasture Profit Index (PPI) 2016

Variety Details			Pasture Profit Index Sub-indices (€/ha/year)						Total €/ha/year
			Dry Matter Production			Quality	Silage	Persistency	
Variety	Ploidy	Heading date	Spring	Summer	Autumn				
AberMagic	D	May 31	47	50	63	36	14	0	210
AberGain	T	June 5	38	44	32	65	25	-5	199
Nifty	D	May 27	77	50	49	-6	20	0	190
AberPlentiful	T	June 9	44	51	38	30	14	0	177
Solas*	T	June 10	34	45	51	31	14	0	175
Dunluce	T	May 30	32	42	43	39	23	-5	174
AberChoice	D	June 9	23	47	36	64	8	-5	173
Rosetta	D	May 24	92	25	33	2	16	0	168
Seagoe*	T	May 28	33	41	29	20	37	0	160
Kintyre	T	June 7	28	35	47	33	13	0	156
Astonenergy	T	June 2	7	37	31	61	11	0	147
Xenon	T	June 11	22	39	26	46	14	0	147
Magician	T	May 22	53	30	26	7	26	-5	137
Alfonso	T	June 4	13	38	27	51	4	0	133
Aspect*	T	June 6	25	41	17	37	9	0	129
Carraig	T	May 24	46	37	23	-11	30	0	125
Navan	T	June 6	10	39	40	26	9	0	124
Solomon	D	May 21	69	29	22	-23	21	0	118
Kerry	D	June 1	34	40	32	0	7	0	113
Delphin	T	June 2	17	40	19	16	20	0	112
Glenroyal	D	June 5	29	40	31	2	7	0	109
Drumbo	D	June 7	26	30	24	44	-5	-11	108
Boyne	D	May 22	54	29	24	-39	39	0	107
Clanrye*	D	June 6	34	42	10	-10	15	0	91
Twymax*	T	June 7	-13	44	7	35	16	0	89
Majestic*	D	June 2	39	32	33	-16	-1	0	87
Glenveagh	D	June 2	27	35	20	-10	8	0	80
Stefani*	D	June 2	21	27	16	-2	8	0	70
Tyrella	D	June 4	40	18	8	3	-1	-5	63
Piccadilly*	D	June 3	26	31	12	-23	15	0	61