



Sheep Farm Walk  
July 29th 2016  
Farm of Peadar Kearney  
Nicolastown, Ardee,  
Co. Louth



**This is a DAFM approved Knowledge Transfer Sheep Event**

## **Introduction**

I welcome you to today's event where you will hear about the on-going changes on Peadar Kearney's farm as part of his involvement in the Sheep BETTER farm Programme. Peadar operates a sheep only enterprise of 300 ewes producing lambs for the factory and replacement ewe lambs for sale. The running of the farm is greatly assisted by local farmer and Ag. Graduate Joanne Martin who has a keen interest in the breeding and performance recording taking place on the farm. The changes implemented on the farm since Peadar joined the BETTER farm program in 2014 have helped improve the efficiency and output from the flock as you will hear in more detail today.

There are 4 stands which will discuss:

Flock performance,

Flock breeding,

Soil fertility and grazing infrastructure,

Lamb performance and grassland management.

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.

I would like to conclude by thanking the Kearney family for their continued participation in the Sheep BETTER farm programme and opening their farm today.

***Hugh Rooney,***

***B&T Adviser, Co Louth***

## **Farm Details**

- 27 ha grassland
  - 2 main splits
  - Out farm ~ 16 ha
  - Home farm ~10 ha
  - 14 permanent divisions
  - Temporary fencing used during season

- Farm system
  - Sheep only system
  - 300 ewes + replacements
  - Stocking rate 14 ewe/ha 2.8 lu / ha
  - Lambed in 2 batches in 2016
    - Batch 1 – 20<sup>th</sup> February onwards (50 ewes)
    - Batch 2 – 1<sup>st</sup> March onwards (250 ewes)
  - Early & Mid-season lamb production until this year
  - Ewe lambs not mated
- Factory lambs all sold through the Monaghan Producer group
- Proportion of ewe lambs sold for breeding
- Ewes housed late December to February
- Stubble grazing available during winter

### **Farm Plan**

- Focused on 3 key areas to improve profitability
- 1. Breeding policy – streamlined system
  - Operate a rotational crossing system
  - Terminal X Maternal back cross
  - (Texel & Suffolk) x Belclare & Blue Leicester)
- 2. Streamline system
  - Exit early lamb 2015 – too high of grass demand on farm in spring resulted in high inputs for both early and mid-season flocks
  - Retain extra ewe lambs to sell as hogget's
  - Push mid-season system
- 3. Grassland
  - Focused on increasing production and improving utilisation
  - Soil fertility – Addressed in nutrient management plan
  - Good paddock system
  - Significant amount of fencing in recent years

- Temporary fencing used effectively during year
- Reseeding programme implemented
- Increase the proportion of home produced forage – more aftergrass in system
- Grass budgeting used - Pasturebase
- 2016 season use larger hogget group as clean up group

### Flock Performance

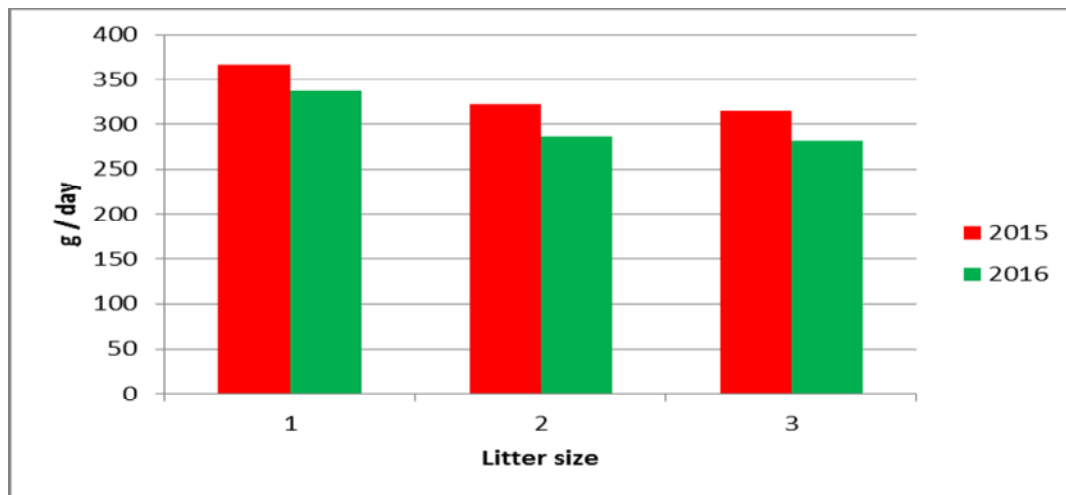
**Table 1.** Performance of the mid-season flock in 2014, 2015 and 2016

|                                    | Year |      |      |
|------------------------------------|------|------|------|
|                                    | 2014 | 2015 | 2016 |
| <b>Litter size</b>                 | 1.8  | 2.2  | 2.1  |
| <b>Ewes lambled (%)</b>            | 92.5 | 92.5 | 91.5 |
| <b>Lambs reared per ewe joined</b> | 1.6  | 1.6  | 1.7  |

- Focused on improving output from mid-season flock
  - Target to wean in excess of 1.7 lambs weaned per ewe joined
  - Increase contribution of grazed grass in the lambs diet
  - Produce replacements for sale
- 
- Increase in flock output from 2014 to 2016
- Extra ewes in mid-season flock and extra lambs weaned per ewe joined

### Lamb Performance

- Grass based system of production
- Aiming to reduce concentrate input for mid-season lambs



**Figure 1.** Lamb growth rates for single, twin and triplet born lambs from 2015 and 2016

Lamb growth rates down approximately 30 grams a day across litter size for 2016 lambs **BUT** concentrate inputs down 15 tonnes on 2015.

**Table 2.** Lamb birth weights, 40 day weights and weaning weights for mid-season lambs born as singles, twins and triplets in 2016.

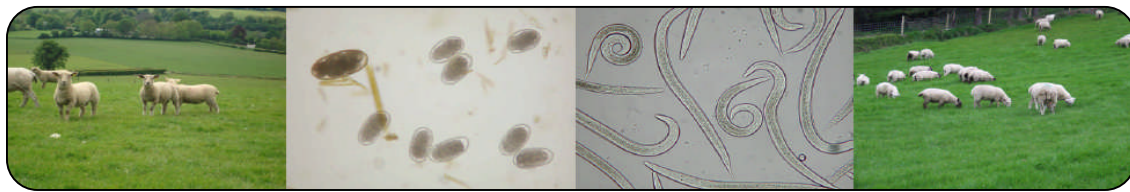
|                 | Birth Weight | 40 day weight | Weaning weight |
|-----------------|--------------|---------------|----------------|
| <b>Singles</b>  | 6.4          | 27.6          | 39.6           |
| <b>Twins</b>    | 5.6          | 22.8          | 34.2           |
| <b>Triplets</b> | 4.6          | 21.7          | 33.1           |

#### Parasite control

- Ewes treated for nematodes (stomach worms) in April using a Macrocylic Lactone (3-ML)
- Dosed against Coccidiosis using a Toltrazuril based product in April (Lambs ~6 weeks old)
- Worm burdens monitored using faecal egg counts
- Dung samples collected from lambs at fortnightly intervals from late May
- Subsequent anthelmintic treatments are based on results from faecal egg counts
- Worm burdens treated twice this year so far using Macrocylic Lactone (3-ML)
- Fluke control burden not traditionally a problem on the farm
  - Ewe lambs treated with with Triclabendazole-based product in late February

## Flock health

- Clostridial diseases
  - Replacement ewe lambs receive initial vaccine in September and booster 4-6 weeks apart in September
  - Ewes receive annual booster 3 weeks pre lambing
- Lameness
  - All sheep are foot bathed using zinc sulphate
  - Problem individuals are treated with an antibiotic.
- Scab treatment (Doramectin based product) given pre-housing to all ewes
- Hoggets receive a toxoplasmosis vaccine prior to breeding
- Blow Fly - All sheep on the farm treated with a pour-on as required
  - 2016 – Applied in June and July (6 weeks apart)



## Breeding policy

- Rotational crossing system
- Terminal X Maternal back cross
- Texel & Suffolk X Belclare and Blue Leicester
- Replacements produced from own flock and bred as hoggets
- Using recorded rams on the flock
- Single sire mating carried out for 2015/16 breeding season and data used to evaluate individual rams

### 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.

Since joining the program soil samples have been taken from the entire farm based on these results a lime and fertiliser plan was implemented.

As summarised in Table 3 the farm has high levels of P and K with over 85% of the farm being either Index 3 or 4 for either P or K. However, soil pH (Table 4) is an issue with 77% of the farm having a pH below 6.2 which is below the target range (6.2-6.5) for grassland. Lime has been applied in order to rectify the pH problem.

**Table 3.** Summary of soil P and K status from soil samples taken in 2015 on the entire Kearney farm.

|                | <b>Soil P</b> | <b>Soil K</b> |
|----------------|---------------|---------------|
| <b>Index 1</b> | 0%            | 0%            |
| <b>Index 2</b> | 13%           | 9%            |
| <b>Index 3</b> | 29%           | 0%            |
| <b>Index 4</b> | 58%           | 91%           |

**Table 4** Summary of soil pH status from soil samples taken in 2015 on the entire Kearney farm.

| <b>pH Range</b> | <b>Soil pH</b> |
|-----------------|----------------|
| <b>&lt; 5.5</b> | 13%            |
| <b>5.5-5.9</b>  | 9%             |
| <b>5.9-6.2</b>  | 42%            |
| <b>6.2-6.5</b>  | 36%            |
| <b>&gt; 6.5</b> | 0%             |

## Grassland Management

- Paddock System implemented since joining programme
- Average paddock size ~ 1 ha
- 14 permanent divisions
- Temporary divisions used as required for managing grass
- Frequent fertilizer application to maintain growth and grass quality
- Grass growth measured weekly and data entered into Pasturebase
  - This gives immediate feedback to aid in decision making

### Options for Temporary Fencing

The 3 most common options for temporary fencing are shown in the picture below. All of these options allow greater control over grazing management and can be run off a battery powered electric fence unit. Peadar uses the three to four strands of polywire option on his farm which is the cheapest of the three options.

