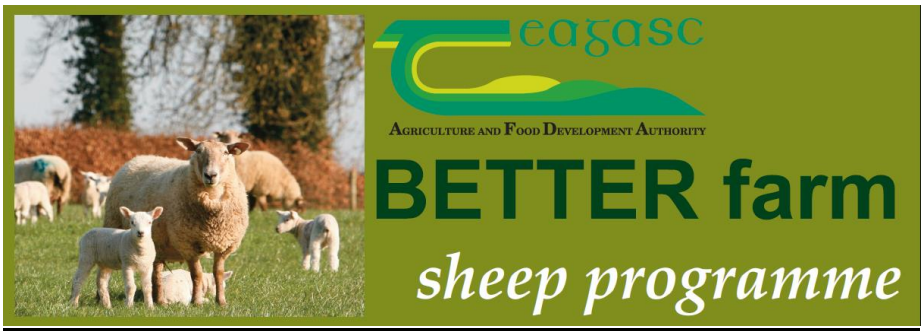


# Sheep Farm Walk

## August 4th 2016

## Farm of John Doyle

## Ballindaggin, Enniscorthy,

## Co. Wexford

**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 John Doyle's farm as part of his involvement in the Sheep BETTER farm Programme. John operates a mixed farming enterprise (sheep, beef and tillage) with his wife Hannah and their children. The changes implemented on the farm since John joined the BETTER farm program in 2012 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:

Farming system and farm plan,

Flock performance,

Grassland management,

Flock breeding.

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 Doyle family for their continued participation in the Sheep BETTER farm programme and opening their farm today.

***Michael Gottstein,***

***Head of Sheep Programme.***

***Martina Harrington,***

***B&T Adviser, Co. Wexford.***

## Farm Details

- 72 adjusted ha - 50 ha grassland & 22 ha tillage
    - 3 main splits
- Farm system
    - Mixed enterprise system – Sheep, beef and tillage
    - 330 ewes + replacements
        - 130 early lambing ewes
        - 200 mid-season lambing ewes
        - 90 replacement ewe lambs lambing @ 12 months old
    - Stocking rate 11.5 ewes/ha (2.25 lu/ha)
    - Early lambing ewes lamb in two batches 10 days apart
        - Batch 1 – 27th December onwards (90 ewes)
        - Batch 2 – 6th January onwards (40 ewes)
    - Mid-season ewes lamb from March 1st onwards
    - Ewe lambs lamb from March 17th onwards
- Proportion of ewe lambs sold for breeding
- Ewes grazed on forage rape and turnips during the winter months
- All ewes housed for last 6-8 weeks pre lambing

## Farm Plan

- Focused on 2 key areas to improve profitability
- 1. Breeding
    - Increasing ewe flock to 400 ewes plus 100 replacements (lambing)
    - Split flock to allow for expansion
    - Increase ewe output – more prolific sires
    - Join ewe lambs
    - Synchronise early lamb flock
- 2. Grassland
    - Target grazing areas e.g. early lamb flock
    - Address soil fertility issues
    - Improve grazing infrastructure – permanent and temporary divisions
    - Reseeding – part of tillage rotation
    - Grass measuring and budgeting – using Pasturebase

## Flock Performance

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

| | Year | | |
|---|---|---|---|
| | **2014** | **2015** | **2016** |
| **Litter size** | 1.77 | 2.01 | 2.05 |
| **Ewes lambed (%)** | 98.1 | 90.2 | 91.7 |
| **Lambs reared per ewe joined** | 1.61 | 1.62 | 1.62 |

- Focused on improving output and building ewe numbers by splitting the flock into early and mid-season lambing groups
    - Target to wean in excess of 1.7 lambs weaned per ewe joined in mid-season flock
    - Maximise contribution of grazed grass in the lambs diet
    - Produce replacements for sale
- Increase in ewe numbers since 2012
- Weaning an extra 300+ lambs since joining the program – scope to improve further
- Breeding ewe lambs to maximise lifetime output per ewe

## Lamb Performance

- Early lambs weaned at 8 weeks old and finished off grass and concentrate diet
- Mid-season lambs finished predominantly off grass (85%)
- Aiming to reduce concentrate input for mid-season lambs

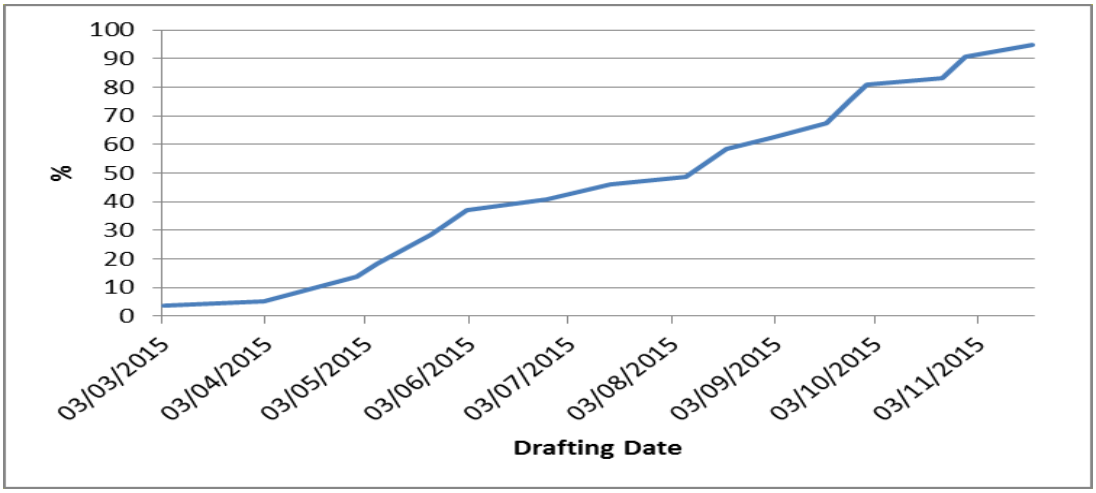


**Figure 1.** Lamb drafting pattern for all lambs (early and mid-season lambs) during 2015.

In 2015 all lambs were finished before Christmas with 85% of the mid-season lambs finished off grass only.

**Table 2.** Mid-season weaning weights 2015.

| Litter Size | Weight (kg) |
|---|---|
| **Singles** | 34.4 |
| **Twins** | 31.0 |
| **Triplets** | 31.0 |

## Parasite control

### Early lambs

- Dosed against Coccidiosis using a Diclazuril based product at ~21 days old
- Treated twice (4 weeks apart) for Nematodirosis (stomach worms) in March/April using a Benzimidazole (1-BZ; white drench) based product.

### Mid-season lambs

- Mid-season lambs treated twice (3 weeks apart) for Nematodirosis (stomach worms) in April using a Benzimidazole (1-BZ; white drench)
- 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 three times this year so far using a Benzimidazole (1-BZ; white drench) based product once and two doses with a Macrocyclic Lactone (3-ML; clear drench) based product

### Yearling Lambs

- Dosed against Coccidiosis using a Diclazuril based product at ~21 days old
- Same as Mid-season lambs thereafter
- Fluke control monitored throughout the grazing season - factory
    - All ewes dosed with Triclabendazole-based product in September
    - Mid-season ewes dosed with a Macrocylic Lactone (3-ML; clear drench) in September

**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
    - Mid-season lambs received a vaccination in April this year
- Lameness
    - All sheep are foot bathed using formaline
    - Problem individuals are treated with an antibiotic
- Ewe lambs to receive a toxoplasmosis vaccine prior to breeding this year
- Enzootic abortion not a problem – closed flock
- Blow Fly
    - Ewes usually plunged dipped, used pour-on this year (mid-July)
    - Lambs receive a pour-on
    - Lambs 2016 – Mid June and late July

**<u>Breeding policy</u>**

- Rotational crossing system
- Terminal X Maternal back cross used on mid-season flock - Suffolk X Belclare
- Texel X Suffolk cross used on early lambing ewes
- Replacements produced from own flock and bred as ewe lambs
- Ewe lambs mated to a Charollais ram
- Using performance recorded rams on the flock
- Single sire mating carried out on early lambing flock over last two years to evaluate ram performance

## 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 low levels of P and high levels of K with over 90% of the farm being either Index 3 or 4 for K. In contrast over 90% of the farm is either Index 1 or 2 for soil P and 97% of the farm has 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 Doyle farm.

| | **Soil P** | **Soil K** |
|---|---|---|
| **Index 1** | 73% | 0% |
| **Index 2** | 22% | 6% |
| **Index 3** | 5% | 32% |
| **Index 4** | 0% | 62% |

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

| **pH Range** | **Soil pH** |
|---|---|
| **< 5.5** | 5% |
| **5.5-5.9** | 55% |
| **5.9-6.2** | 37% |
| **6.2-6.5** | 3% |
| **> 6.5** | 0% |

## Grassland Management

- Paddock System implemented since joining programme
- Targeted grazing areas – e.g. early lamb flock
- Average paddock size ~ 1.5 ha
- Permanent divisions being erected – ongoing process
    - Applied for TAMS
- Temporary divisions used as required to control 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. John is using three to four strands of electric fencing steel wire on his farm which differs slightly from the options listed below which, in general, are the three most common options.