

Driving productivity and profitability on sheep farms

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The top three drivers of profitability are:

1. Litter size and the number of lambs reared per ewe joined to the ram.

2. The number of ewes per hectare of the farm allocated to the sheep enterprise.

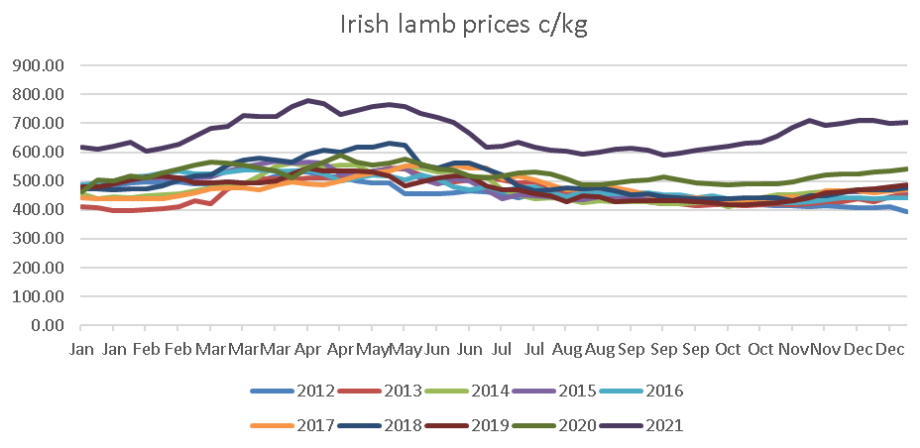
3. Cost control, in particular purchased feed, pasture and veterinary costs.

But what about factors such as lamb growth rate, factory price and concentrate feed price? These are indeed significant but they are definitely not as important as the items listed.

The percentage of lambs sold early is often seen as a good measure of the efficiency. This figure is useful but it does not indicate whether lamb performance was grass-based or the result of expensive concentrate supplementation.

For the last 10 years, the lamb price has been remarkably flat for mid-season lamb producers.

Figure 1: Irish lamb prices 2012 – 2021



Source: Bord Bia

Case study: Thomas, Michael and Hannah Kate Finn, Curraghbowen, Mitchelstown, Co Cork

- 20ha land – 108 ewes to ram including ewe lambs.
- Breeds: crossbred ewes, a small number of pedigree Belclare ewes (rams sold as shearlings). Most lambs sold as butcher and factory lambs in Fermoy Mart.
- Previous litter size was two. Rearing 1.7 lambs per ewe to the ram.
- Grassland plan – 20ha of good land, suitable for drystock, dairy or tillage. It takes approximately one tDM to feed one ewe and her lambs. Target is to grow 12tDM/ha. Target stocking rate of 10 ewes plus replacements per ha.

Target to allocate 50% of area to sheep – the balance for contract rearing heifers, beef or tillage.

Thomas has 2.07ha of wild bird cover along with his 20ha of grassland. The

farm was soil sampled in January 2022 with P and K indexes ranging from two right up to four. The average farm pH was 6.4. Twenty tonnes of lime was applied in late 2023.

Thomas currently has no cattle on the farm so he has no slurry to spread. He spreads the farmyard manure he has from the sheep and some imported pig slurry using LESS. Manure helps keep the artificial fertiliser bill low.

The grass management goal is to establish five permanent divisions per grazing group with the option of further sub dividing with a three-strand temporary electric fence.

This rotational grazing system enables the farm to maximise grass growth and quality by protecting re-growths and facilitating the removal of surplus grass

as high-quality silage.

Tom's autumn rotation plan used to close ground to ensure adequate grass in spring was:

- 20% of the grazing area closed by end October.
- Further 20% closed in two weekly intervals.
- Sheep housed when grass runs out in mid-December.

Lambing will start in early March. The annual target for winter forage will be to harvest approximately 120kg dry matter of high-quality grass silage at 75% DMD (five- to six-week growing period) per ewe.

Breeding policy

The Finns are in the Sheep Improvement Scheme. They chose the genotyped

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sheep

Case study



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ram option for 2023. In August last year, Thomas purchased a Suffolk ram that will meet the requirements of the scheme. The ram is genotyped and has five stars for both replacement and terminal indexes.

"I find Suffolk cross ewes to be good mothers and easy to manage," says Thomas.

"The ram will be used to sire predominantly terminal lambs but I will keep the best ewe lambs as replacements. We also have Texel and Belclare rams.

"Our ewes are predominately Suffolk x Belclare cross and we have some Texel crosses too. We are Belclare pedigree breeders and a number of pedigree ewes in the flock will be mated with pedigree rams.

The aim is to produce high-quality Belclare rams that will be SIS-approved and sell them to other sheep farmers."

Thomas is already using Belclare genetics so litter size is around where it should be. His terminal sire breeds are selected based on Euro-star indices – five-star for Replacement for rams being used to breed flock replacements (plus emphasis on daughters' milk) and (for non-Belclare sheep) number of lambs born.

For terminal rams being used to breed lambs for slaughter the emphasis should be on the terminal index – five stars (plus emphasis on days to slaughter and lamb survival).

Flock health

On the Finn farm all sheep are vaccinated annually with Tribovax or Covexin to guard against clostridial diseases.



Teagasc advisor Laura Whelan and Thomas Finn.

Internal parasites

Faecal egg counts are regularly carried out often on the farm and they have never shown a positive egg count for liver fluke. Consequently, sheep are not treated for liver fluke.

Stomach worms are a particular challenge that sheep farmers face each year. The initial worm dose (and possibly the second one) targets nematodirus and for this Benzimidazole-based (white) wormers are used.

"I use faecal egg counts to establish if mid-season stomach worm control is needed," says Thomas.

"Once egg counts exceed 500epg treatment is generally warranted. We do a post-drench test to ensure that the wormer has achieved a reduction of at

least 95%."

Both levamisole and Ivermectin-based wormers are effective on the Finn farm base on faecal egg count analysis.

External parasites

Primarily blowfly and biting lice are controlled using pour-ons. Clik is used on the farm to prevent flystrike on the farm treatment starts in April or early May weather dependant. It's key to apply the insect growth regulator before sheep are struck. For lambs the ideal time of the year to do this is in early May – low weight lambs need a lower dose rate and also ensures that the withdrawal date is not an issue. Ewes are treated after shearing.

Lameness

The predominant lameness issue on the farm is scald. Thomas treats this by running the sheep through a 10% copper sulphate solution. He has a mobile sheep handling facility and footbath. He plans to construct a batch footbath.

Future steps

"This year we plan to bring some cattle onto the farm to help with parasite control," says Thomas. "I hope to gain more knowledge and experience on grass measurement and management through the knowledge transfer programme discussion group I have joined.

"We think growing up around livestock is good for our children but the enterprise must also pay its way and we will continue to monitor our productivity and profitability by completing an E-Profit Monitor."

Figure 2: Genetic evaluation of the Suffolk ram purchased this year

