

Forage crops and store lambs proving a good fit

Increasing the area of forage crops sown has helped integrate the sheep and tillage systems on the Gavin farm in Co Carlow

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Eddie Gavin, his wife Laura, their two young children and his parents farm near Bagenalstown, Co Carlow. Eddie is part of the BETTER farm programme operating a mixed farming system, including sheep, beef and tillage enterprises. He is also a machinery contractor.

Integrating the livestock and tillage systems in rotation is a key component of how the Gavin farm will develop over coming years. Ewe numbers have already increased slightly, to 270 lambing in March.

“We could have increased output from the sheep enterprise further, but our decision was to fit the sheep in around the time demands of the other enterprises and the facilities available,” says Eddie.

“With some forage crops already going in each winter to carry the ewes, we looked at increasing the area of forage crops sown, with a view to adding a store lamb finishing system. This offered a better fit for a number of reasons.”

Firstly, it did not increase labour demands or facilities required in the spring and secondly, it allowed Eddie to take advantage of the farm’s ability to grow winter feed.

It also provided an additional revenue stream at a relatively quiet period of the year. This increases the overall financial contribution of the sheep system to the farm’s profit.

Thanks to an early cereal harvest, hybrid brassicas, Redstart and Gorilla, were sown at the start of August with a second area of ground sown in mid-August.



The Gavins finish purchased store lambs into the winter. These are turned out to grass pasture for a number of days after quarantine protocols before being introduced to the forage crop.

Seed was established using min-till, following a run of a disc harrow over the stubbles. Sowing date has a big impact on crop yield, with a notable difference visible between the crops. Weather conditions had determined when the crops could be sown.

Forage crops

The crops received 123kg/ha of 18:6:12 at sowing and were topped up with 62kg of protected urea two to three weeks later. In addition, two hectares of stubble turnips had been sown in late July for grazing by the ewes prior to scanning.

The crops are set up for block grazing with access to a grass lie-back.

“To keep the grazing setup simple we create a break line with the quad and use three strands of poly wire,”

says Eddie. “We use mains power on the main grazing block and battery fences on the outer grazing block.”

Each division is setup to allow four to five days’ grazing (depending on the weather); an initial estimation of crop yield helps determine this, and the area allocated thereafter is based on how the previous block was grazed.

“I have the fence in place for the next block each time I move lambs to a fresh block,” says Eddie. “That means I am one ahead each time and should any break through they will not get any further than the next grazing area.”

Store lamb finishing

The crops provide a viable option for carrying and finishing purchased store lambs into the winter, while also allowing Eddie to transition his own lighter lambs on to the system. This reduces the pressure on the grazing block.

“Last year I bought in 116 crossbred hill lambs in two batches, in late September into early October,” says Eddie. “The lambs came on to the farm with an average weight of just over 30kg.”

Ensuring only healthy lambs are purchased and that they go through the correct bio-security protocol, will

Farm facts

- Three land blocks.
- 47ha of grazing ground.
- Mid-season ewe flock.
- Store lamb finishing enterprise.
- Dairy calf-to-beef/store enterprise.
- 46ha of tillage ground.



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Hybrid brassicas were sown at the start of August with a second area of ground sown in mid-August.



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protect the health status of the existing flock.

On arrival, Eddie's lambs were put through the following quarantine protocols:

- Injectable macrocyclic lactone plus levamisole stomach worm dose.
- Closantel-based fluke dose.
- Clostridia plus pasturella vaccine (first shot. Second shot fourth weeks later).
- Footbath.

The lambs were housed for 48 hours and offered hay, after which they were turned out onto a grass pasture for a number of days before being introduced to the forage crop.

It is important that lambs spend 48 hours indoors after the stomach worm dose to prevent the potential spread of resistant worms on your own pasture.

Over the course of a week lambs were introduced to the crop for a few hours each day before being fully transitioned onto the crop.

Details of the lamb performance are outlined in Table 1. Lambs gained on average a little over 1kg/week, with concentrate supplement introduced

in late December for the final few weeks.

"The first batch were drafted at Christmas time, with two subsequent drafts in February and March," says Eddie. "They produced an average carcass weight of 23kg. When all costs were included, seed sowing, fertiliser and health treatments, the system left a margin of approximately €41/lamb purchased."

This year the first batch of store lambs arrived in late September these were slightly more forward, with average weight of just over 35kg. Eddie plans to add to these with another batch of lighter lambs in early October. Both batches and his own lighter lambs will then be introduced to the crops.

Table 1: Performance of purchased store lambs grazing forage brassica crops on Eddie Gavin's farm in autumn/winter 2022/2023

Variable	
Starting Weight (kg)	30.4
ADG (g/day)	148
Finishing Weight (kg)	47.1
Days to finish	115

Overall system

The make-up of the enterprises on the farm and the benefits of rotating the tillage fields and grazing fields mean Eddie can develop a sustainable system tailored to his farm. Some of the areas grazed under forage crops this winter will be sown in high clover percentage leys (red and white) next spring, aiming for a three-year window before being returned to tillage.

"From a tillage perspective the rotation into and out of grassland and use of forage crops, post-winter crops will allow us to gradually build the soil organic matter content," says Eddie. "Sowing forage crops after cereals also helps to utilise remaining nutrients left in the ground. I believe crops grown on areas that were grazed have improved yields."

From a livestock perspective, Eddie is able to deal with issues encountered with anthelmintic resistance on the farm by rotating some of the permanent grazing area with tillage and reducing overall parasite burden on pasture.

"It also provides a way to finish lambs, an additional enterprise, without increasing capital investment," he concludes.