

Two systems, one aim – BETTER sheep performance

A consistent breeding policy and integrating hill and lowland systems are key components of maximising flock performance on this Teagasc BETTER sheep farm in Co Donegal

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David and Linda McLaughlin, who farm just outside Greencastle in Letterkenny, Co Donegal, have been participating in the Teagasc BETTER Farm Sheep Programme since 2009. They run both lowland and hill sheep enterprises, alongside a herd of suckler cows. A cornerstone of the McLaughlin's sheep enterprise has been to have a consistent breeding policy, which integrates the two sheep systems on the farm.

Farm layout

The farm is laid out in three main blocks, comprising of 8.5ha of adjusted lowland at the home farm, which joins the 155ha of hill land (adjusted to 31ha). There is an additional adjusted 17ha of lowland ground, which is used for the lowland sheep flock and cattle for most of the grazing season.

The hill flock is made up of 250 purebred Lanark ewes, lambing outdoors from April 5, with the lowland flock lambed indoors from March 10.

The lowland flock comprises of approximately 110 ewes, with 80 Belclare cross Lanark ewes. These run alongside 30 Lanark ewes that have been culled from the hill flock, but are still able to perform on lowland ground.

Defined breeding policy

As with all Teagasc BETTER sheep farms, one of the first things done on the McLaughlins' farm was to



David McLaughlin (facing in black cap) discusses his system with a visiting sheep discussion group.

develop a detailed farm plan, with a key element being the flock breeding policy. In this instance, the breeding policy was designed to allow the hill flock to produce sufficient replacement ewe lambs for both the hill and lowland flocks, as shown in Figure 1.

This allows for all the lambs born on the lowland flock, which are higher value than the hill lambs, to be sold as factory lambs or breeding ewe lambs. Keeping 30 Lanark ewes for one final crop of lambs on the lowland allows the McLaughlins to breed mule ewe lambs as part of the Donegal Mule group, which adds further value to the lowland lamb crop.

Hill flock performance

In order for this system to work, a

high level of performance is required from the hill flock to allow a portion of the ewes to be crossbred. A Belclare ram is bred to approximately 25% of the hill ewes, with the remainder of the ewes being bred to Lanark rams.

The McLaughlins' hill flock is consistently achieving high weaning rates and they have improved this significantly during their time as members of the BETTER farm programme.

Lamb performance has also been consistently on, or above, target for a hill flock. This year at weaning time (14 weeks), the single-born lambs had an average liveweight of 27.9kg and had grown at 234g/day from birth to weaning.

Table 1: Flock performance on the McLaughlins' hill sheep enterprise

	2009	2019	2020
Ewes joined	223	249	247
Ewes lambed (%)	87	85	88
Litter size	1.2	1.3	1.49
Lambs reared/ewe joined	0.9	1.0	1.2



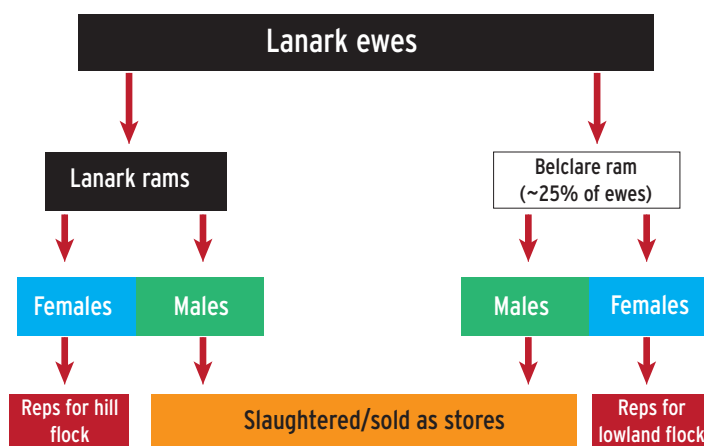
Lowland flock performance

The lowland flock is also achieving high levels of performance and the prolificacy and weaning rates have been improved and maintained over the past 10 years, as presented in Table 2. All the Belclare cross ewes are mated to a Texel ram, while the Lanark ewes taken from the hill flock are bred to a Blue Leicester ram to breed mule ewe lambs for selling.

Ewe numbers have increased over the years while maintaining the same land base, which is a result of improving soil fertility and grassland management on the farm.

In 2020, the twin lambs from the lowland flock were, on average, 32.4kg at weaning and achieved an average daily gain to weaning of 280g/day. This is a good level of performance from a grass-based system and from a flock that has approximately 30% purebred hill ewes included in it.

Figure 1: Description of flock breeding policy on McLaughlins' hill sheep flock



Conclusion

A consistent breeding policy is essential for all sheep flocks and must be designed to suit the farm and the

system employed on the farm. David and Linda McLaughlin have demonstrated the benefits of this constantly over the last number of years.

Table 2: Summary of flock performance on McLaughlins lowland sheep enterprise since 2009.

Year	2009	2019	2020
No ewes mated	59	111 ¹	110 ¹
Litter size	1.87	1.94	1.99
Ewes lambed (%)	91.5	97.3	97.3
Lamb mortality (%)	4.1	11.1	7.5
Lambs weaned per ewe joined	1.59	1.70	1.75

¹Includes 30 Cull BFM ewes.

