

Why less can be more when it comes to lamb carcass weight



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Teagasc researchers are investigating the potential for finishing of hill lambs to carcass weights of 12-16kg.

Ireland produces about 250,000 Scottish Blackface male lambs annually, typically weighing 20-26kg when weaned. Historically, many of these lambs were slaughtered at light carcass weights for the Italian market. This market no longer exists.

Previous research carried out in Teagasc Athenry has shown the potential to finish hill-bred male lambs to carcass weights in excess of 18kg while meeting market conformation and fat score specifications satisfactorily; though the period of feeding is prolonged, particularly for lambs that are light at weaning.

These studies also demonstrated that hill-bred lambs were highly responsive to improved nutrition post-weaning. Recently, these studies were extended to finishing hill lambs to comparatively lighter carcass weights following short-term intensive feeding.

As with any intensive finishing system, this requires good flock management to keep mortality rates low and ensure lambs are drafted at the correct weight to avoid selling lambs that are too light or don't have sufficient muscle and fat cover to meet market specifications.

Light lamb finishing

The studies were undertaken in Teagasc Athenry to ascertain if it was possible to finish light Scottish Blackface male lambs to produce carcasses of 12-16kg with a suitable covering of



Picture 1.

On the left a 14.6 R2 carcass slaughtered at 33.5kg liveweight and on the right a 15.7kg R2 carcass slaughtered at 34.5kg liveweight.



Picture 2.

It is important that lambs are the appropriate weight and have adequate muscle and fat cover to meet the specifications for the light lamb trade.

fat. The performance of these lambs on these studies is summarised in Table 1. Lambs were housed after weaning at an average liveweight of 25kg and slowly built up to ad-lib concentrate intake.

Both castrates (wethers) and ram lambs were used and were drafted for slaughter once they reached a minimum 30kg liveweight for wethers and 31kg liveweight for ram lambs and had a level of fat cover equivalents to fat score 2 post slaughter. Where lambs, particularly ram lambs, reached 36kg liveweight and were deemed "unfinished", then they were retained and fin-

ished to French market specification (greater than 18kg carcass weight).

Proper selection of lambs for slaughter is essential with this system and lambs must be weighed regularly to avoid lambs falling out of specification for the light lamb trade and still being under-finished for French specification markets.

Where lambs are too heavy for the light lamb market or reach the correct liveweight but have insufficient fat cover to market specifications then it is necessary to carry these lambs to a minimum of 42kg to finish for the French specification market.

In our studies, approximately 15% of the lambs initially housed to finish as light lambs were sent for French market specification, showing the importance of regular live weighing and handling of the lambs. In our studies it took approximately five to six weeks of intensive feeding for lambs to finish to the light lamb specification, during which time lambs consumed approximately 1.15kg DM of concentrates per head per day once offered a concentrate ration ad-lib.

Research in practice

The results of this research have been positively received by hill farmers, with numerous groups visiting Teagasc Athenry to view the research, discuss the results and see how to correctly select lambs to meet the market specification.

One such group has established the Atlantic Hill Lamb brand which was started in recent years and is an initiative supported by the INHFA, Bord Bia and Kepak. This group is sourcing light lambs from hill farms that meet market specifications of 10-15kg carcass weight with a minimum carcass conformation of O and a minimum fat class of 2.

While still in its early stages, the initiative is being enthusiastically received by farmers, who see the potential to finish some of their own light lambs on farm rather than relying totally on the store lamb trade. Since its inception this producer group has supplied in the region of 35,000 lambs to this market and are hopeful this



Pictures: Ivan Kelly

Farmer profile: Brendan Joyce, who farms four miles west of Maam Cross in Connemara

Brendan has a flock of 350 Connemara X Mayo Blackface ewes in a commonage based system on SAC/SPA land with lambing in April to make the most of the grass available. "In the past as hill farmers we



always had to sell lambs as stores," says Brendan.

"This system gives hill farmers the option to finish to a 10-15kg carcass and maybe increase their margin. Not every farmer can do it but it also has the potential to improve store prices.

"It's early days but the market feedback is very encouraging, the lambs make best use of the pasture available which means they are naturally slow growing and there's a taste benefit. It's very much a premium product."

Table 1: Effect of lamb sex on lamb performance pre- and post-slaughter

	Rams	Castrates
Housing liveweight (kg)	25.7	25.5
Slaughter liveweight (kg)	34.1	33.1
ADG from housing to sale (g/day)	233	181
Carcass weight (kg)	14.8	14.6
Carcass grade	2.3	2.4
Fat score	2.5	2.6
KO%	43.3	44.2
Days on intensive diet	36.1	42.0

can be expanded in the future.

All suppliers of lambs are now Bord Bia quality assured. Initially, all lambs were marketed through one processor, though currently three processors have developed markets for these lambs. The research undertaken by Teagasc in Athenry has provided the stimulus for the estab-

lishment of the producer group and blueprint for finishing these lambs has emerged from this research. It is estimated that such lambs return an extra margin of €15-20/head. The development of this outlet for hill lambs has also established an improved floor price for the remaining hill store lambs.

CONCLUSION

There is potential to finish hill bred male lambs at lighter carcass weights while meeting market specifications for conformation and fat cover. However, markets are somewhat limited for these carcasses so it is important to have a contract for these type lambs and careful selection of lambs for slaughter is essential to ensure carcasses meet minimum specification for payment. Future research into finishing lighter hill lambs aims to look further into the effect of diet and breed type for these finishing systems.