

Efficient housing eases workload



Lambing time is stressful. Good planning and plentiful pens can reduce the strain

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In 1999 and 2000 Teagasc conducted an in-depth labour study on 30 sheep farms nationwide. One conclusion was that farms with good sheep housing were 25% more labour efficient than farms where facilities were rated as poor. The study also found that lambing time accounted for one-fifth of the total year's work.

The message is still valid. Well designed and well managed housing and lambing facilities alongside good flock husbandry can help ease the burden during this extremely busy period.

Table 1: Feeding space requirements

Type of Ewe	*Meal Feeding mm	Roughage (hay rack)	Easy Feed Silage
Large (90kg)	600	200	200
Medium (70kg)	500	200	200
Small (50kg)	400	175	175

Source: DAFM S146 (2016)

Table 2: Floor space

Type of ewe	Slats m ²	Bedded m ²
Large (body weight 90kg)	1.2	1.4
Medium (body weight 70kg)	1.1	1.2
Small (body weight 50kg)	1.0	1.1

Source: DAFM S146 (2016)

Sheep housing: Key considerations

- Sufficient feed space so that all ewes can comfortably eat concentrates at the same time; being fed by one person without them needing to enter the sheep pens (see Table 1).
- Adequate floor space, depending on

housing system (see Table 2).

- Adequate pen divisions so that ewes can be grouped by expected lambing date (raddle colour) and scanned litter size.

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- Access to a suitable water supply in all pens.
- Easy access to individual lambing pens (ideally under same roof).
- Feed passages wide enough for machinery access and/or using for individual pens.
- Removable penning for ease of cleaning out and the option to use building for other purposes during the rest of year (straw bedded).
- Suitable lighting and power sockets.

In general, 10 medium-sized ewes will be able to eat meal together in a standard 4.8m bay. On farms where there are issues such as non-infectious abortion cases, prolapse or twin lamb disease, the feed space available should be measured. Take off 600mm from the total for each corner in sheds where walk through troughs are in place.

Where all concentrate feeding is from the central feed passage along the front of the pen, relatively shallow pens of 2.5 to 3.0m will provide enough floor space. If pens are, say, 6.0m in width, walk through troughs will be needed to optimise the number of ewes that can be accommodated in pens, balancing floor space and feed space.

Tips for reducing labour demand at lambing time

- Follow a late pregnancy nutrition plan which optimizes lamb birth weight and enables ewes to produce enough quality colostrum to feed her newborn(s).
- Provide ample individual pens and have them set up well in advance of the expected start of lambing.
- Install a pipe system with ballcock to provide water to a number of individual pens.
- Clearly identify problem ewes so they can be culled from the flock before the 2019 breeding season.
- Compile a list of essential supplies and stock up well in advance.
- In high-prolificacy flocks have a definite policy for dealing with surplus lambs.

Late pregnancy nutrition

In practice, most ewes are supplemented with bought-in concentrates in the form of a nut or ration along with hay or silage. A representative silage sample analysis will allow you to decide how much, and for how long, you will need to feed concentrates. Ewes should be grouped and fed according to expected litter size (scanning) and expected lambing date (raddle colour at mating). Look for a nut or a ration with top quality ingredients, where soya bean is the main protein source, to ensure plenty of top quality colostrum is available to your newborn lambs.



Peter Musgrave

Joanne Masterson, Teagasc Advisor, Athenry

Peter farms in Cleggan, Co. Galway and has 450 ewes. The flock includes Mule ewes, Lanark Crosses and Scottish Blackface ewes. Blue Leicester rams are crossed with the Lanark flock to produce mules. The farm has both lowland and mountain grazing which is suited to the breeds of ewes that are kept on the farm.

"In 2013 after a long time planning we built a five bay (24m x 15.3m wide) straw bedded sheep shed," says Peter. "Our aim was to reduce the labour requirement on the farm, in particular in the busy spring period when lambing starts. Planning ahead for jobs like feeding, organising lambing pens, bedding, moving freshly lambed ewes, watering and cleaning out were all elements we had to think about when designing the shed."

The structure is positioned facing east so the prevailing westerly winds are towards the back of the shed. This provides protection against the severe weather often encountered in this part of the country. The building is well ventilated with vented metal sheeting alongside the length of the structure for inlet of fresh air combined with a raised ridge

cap to allow stale air to escape.

It makes for an environment free of airborne pathogens, but also free of draughts. There are three sliding doors on the shed allowing excellent accessibility. As well as this the superstructure is a portal frame design which eliminates internal stanchions. As all penning can be dismantled the shed can be easily and safely cleaned out by mechanical means.

"Our lambing is split with the mule flock kicking off in early March followed in late March/early April by the Scottish Blackface and Lanark flock," says Peter. Because Peter regularly changes the raddle colours on the rams during mating, ewes can be housed in batches based on expected lambing date.

"I prefer to delay housing until a few weeks pre lambing and I've noted a drop in lamb mortality due to better observation since building the new shed," he says.

The internal layout comprises a central feed passage and is divided into eight pens allowing ewes to be grouped and fed according to expected litter size. To strike the balance between required floor space per ewe and required

trough space to feed concentrates walk through troughs were installed. These also serve as pen dividers. This provides 500 to 600mm of feed space per ewe so that all can get access to concentrate feed at one time.

The central feed passage provides enough space for a tractor to drive in and drop off bales of hay or silage. There is also access to a fresh supply of water in each of the pens which is important as housed ewes on dry feed can consume as much as six litres of water per head per day in late pregnancy and even more after lambing.

Finishing

"The penning is designed so that it can also be used for finishing lambs indoors later in the year," says Peter. "The building is well serviced with LED lighting both inside, and for the surrounding yard outside. While the electrician was on site we got him to install some power points adjacent to the individual pens."

Once lambing starts, ewes that have lambed are moved to a dedicated lambing unit which is set up in the same shed. The area is thoroughly cleaned out and disinfected in February each

year before lambing begins. Mobile penning units (1.8m x 1.2m in size) are set up in this individual penning area.

Peter pays particular attention to using lots of straw in these pens and also uses hydrated lime to provide a warm and dry environment.

"As far as possible individual pens are cleaned out, limed and freshly bedded after each use," says Peter. "After a day or two for ewes and lambs to bond they are moved to a group pen in another shed on the farm for a couple of more days before being turned out to grass. This maintains enough space in the lambing unit for the next batch of ewes to lamb. Having this extra space at hand during lambing has proved priceless.

"I am very pleased with the layout of the shed and the convenience it has brought, in particular in the busy spring months. It provides enough space for the current flock size and, combined with the use of other sheds on the farm, I can utilise it fully for lambing time.

Having a well-designed sheep shed with appropriate facilities really can help reduce time and labour spent on the farm," Peter concludes.

Individual pens

Set up pens (1.5m x 1.5m recommended) before lambing starts, having cleaned and disinfected the area beforehand. As a guide, one individual pen per 8 – 10 ewes is sufficient. It should be up to one pen per six ewes where lambing is compact. You can never have too many.

Water to individual pens

A sealed pipe with strategically cut slots and fitted with a ballcock can provide water to a number of individual pens and is a big time saver.

Culling to reduce labour

Ewes that are found to present issues such as prolapse, difficult lambing, poor mothering ability, inadequate milk supply, etc, soak up time and should not be given the opportunity to reoffend the following year. Apply a permanent mark such as a management tag to identify such ewes for culling, marking spray fades, or is shorn off.

Orphan lambs

Some ewes, with correct post-lambing management, will be able to successfully rear three lambs. If not, generally the best option is to cross foster surplus lambs on to single-bearing ewes. Most flocks will still end up with some pet lambs and the higher the expected litter size the more significant the numbers are likely to be.

For these lambs the option is to either sell them or rear them artificially. Small numbers are generally bottle reared which is labour intensive at an average of four feeds per day for five weeks. Where bigger numbers are being dealt with there is the option of providing a simple ad lib milk feeder. The main thing is to have a strategy.