Winter Shearing
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The winter housing of ewes is common on many farms and despite increasing costs the practice is associated with a number of management benefits. During mild winters housed ewes can however suffer from a degree of heat stress particularly in late pregnancy. This can lead to:

- Reduced appetite. In late pregnancy this can quickly result in pregnancy toxemia (twin-lamb disease) or hypocalcemia
- Reduction in lamb birth-weights
- Increased risk of respiratory disease

Winter shearing avoids heat stress in housed ewes and results in improvements in animal performance. However, there are also some disadvantages associated with winter shearing and its successful use requires careful planning.

Where the decision is made to shear housed ewes it is vital to allow sufficient regrowth before turnout post-lambing and to avoid shearing lean ewes. It is therefore recommended that shearing takes place as soon as ewes are housed and at least six to eight weeks pre-lambing. This allows sufficient time for regrowth to ensure a fleece length of 15-20mm at turnout.

Date of lambing should also be carefully considered to avoid shorn ewes being subjected to prolonged periods of poor weather which can lead to poor milk production. In practice winter shorn ewes should not be turned out before mid/late March. Even when sufficient wool growth is present newly lambed ewes should have access to good shelter. This is an additional benefit of winter shearing with young lambs benefiting from the shelter sought out by the ewes.

Good ventilation is vital for housed stock with poor ventilation leading to respiratory problems and disease at lambing. Properly designed ventilation will permit the free circulation of air above sheep height and avoid draughts at sheep level.

In mild winters heat stress can reduce lamb birth-weights.
Increased stocking rates
As a general guide pregnant ewes weighing between 45 and 60kg require a floor space of 1.0m$^2$ – 1.2m$^2$ whilst larger ewes require 1.2m$^2$ – 1.4m$^2$ floor space. Winter shearing can reduce this requirement by 10% to 25%. It is however, important to remember that there is no corresponding reduction in the amount of trough space required.

When ewes are fed together e.g. using troughs or feed-barriers it is vital to have enough space to avoid excessive competition and aggression. As a guide hill ewes need approximately 30cm of trough space whilst larger ewes need approximately 45cm. For ad-lib forage the space allowance is 12-15cm per ewe.

Higher lamb birth-weights
Winter shearing can increase lamb birth-weights by about 0.5kg. This is partly due to increased feed intake which is a direct result of shearing and also due to a slightly longer gestation period as a result of the lack of heat stress. Increasing lamb birth-weight is particularly beneficial in prolific flocks with a high proportion of twins and triplets. The increase in lamb birth-weights can however result in high birth-weight singles leading to increased lambing difficulties. Careful monitoring of the condition of single bearing ewes is therefore vital and both the quality and quantity of feed allocated to these ewes should be carefully considered.

Birth-weight is a major factor influencing survival of newborn lambs. Small lambs have poor energy reserves, are more prone to hypothermia and can struggle to compete for feed. Large lambs are, however, more likely to suffer from lambing difficulty leading to lambs dying during the birth processes or suffering from internal damage, which either leads directly to losses or poor vigour which can lead to further losses.

Weighing a representative selection of lambs at birth can be a useful indicator of ewe management pre-lambing. For typical lowland cross-bred ewes (e.g. 70-75kg), single born lambs bred to a terminal sire should weigh between 5.5 and 6.5kg, twin born lambs 4.5 to 5.5kg and triplet born lambs should weigh a minimum of 4kg.

Research work carried out in Ireland has also shown that each 1kg increase in lamb birth-weight increased weaning weight by 3.2kg. Increasing birth-weight by 0.5kg through winter shearing could therefore be expected to increase weaning weights by 1.6kg.

Easier monitoring of ewe condition
Ensuring ewes lamb at optimum condition leads to improved lamb birth-weight, lamb survival and growth rate. Ewe condition score should, therefore, be continuously monitored throughout pregnancy and winter shearing can ease this process although ewes should still be physically assessed at regular intervals.

Ensuring ewes are in the right condition at lambing is vital to ensure as many ewes as possible reach this target whilst avoiding both lean and fat ewes.

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Increased forage intake
With the removal of their fleece ewes will consume more forage to maintain body heat. Whether this is an advantage or disadvantage depends on the feed stocks available and the quality of this conserved feed. However, in general, good quality silage provides the most cost-effective source of feed compared with cereal based diets and will also provide optimum conditions for the rumen to function. Winter shearing does nevertheless require a guaranteed source of forage since, once shorn, ewes cannot be turned-out for at least six to eight weeks. Feed budgeting well in advance of shearing should, therefore, take place to ensure sufficient forage is available.

During late pregnancy and regardless of whether ewes have been winter shorn, twin and triplet bearing ewes will generally require additional supplementation with an additional high quality feed.

It is in the last six weeks of pregnancy that the majority of foetal growth occurs and ewes have significantly increased energy and protein requirements.

Meeting these demands often requires additional supplementation particularly where forage quality is poor. Analysis of forage is therefore vital and will allow for the development of the most cost-effective feeding regime.

Analysis of forage also allows preferential feeding of groups with higher feed demands (e.g. twins and triplets). Targeted feeding of single bearing ewes with lower quality forage* can help avoid problems associated with high lamb birth-weights.

*Ewes are susceptible to disease or low intakes from mouldy and poorly made forage. Such feed should be avoided regardless of litter size or ewe condition.

Disadvantages

Not suitable for ewes in poor condition
Winter shearing should not be carried out in ewes that are in poor condition (condition score 2.5 or less). These ewes are unlikely to be able to generate enough heat following removal of their fleece and are more likely to suffer from infectious and metabolic disease as well as leading to welfare issues. Where weather conditions are poor the use of cover combs is recommended although this will not fully compensate in very cold conditions. Where there is any concern, veterinary advice should be sought before shearing.

Summer heat stress
A ewe’s fleece acts as an insulator and not only protects the animal from the cold but also helps keep the animal cool in the summer. However, sheep are poor at dissipating heat and gathering winter shorn ewes in warm conditions during the following summer can predispose these ewes to heat stress.

The main indicator of heat stress is continued panting even when the animal is standing still. If the animal’s body temperature continues to rise it can eventually collapse and die.

Requires good summer fly control
With an increase in fleece length over the summer period, good fly control and prevention of ‘dags’ is vital. A range of products are available but recommended application timings should be considered to ensure optimum efficacy.

Can cause ‘wool slip’
Winter shearing can cause a condition known as ‘wool slip’ in which ewes lose patches of wool most likely as a result of stress hormones released from housing and then shearing. Should this occur, veterinary advice should be sought.
The winter shearing checklist

• Are ewes in good enough condition before shearing takes place? Is it practical to manage any ewes that are in poor condition separately and avoid shearing until summer?

• Is there sufficient time for fleece regrowth before lambing?

• Is a cover comb required?

• Has the building used for winter housing been checked for ventilation and draughts?

• Is adequate bedding and forage available?

• Has the forage been analysed?

• Are sheltered conditions available on turn-out?

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