Improving Ewe Efficiency (2);

Meeting Benchmarks - Pre Lambing

Practical Guide

There are a number of different aspects of flock management that must be considered to improve the efficiency within a sheep flock and achieve or exceed industry benchmarks.

Efficiency improvements will in turn reduce the carbon footprint per kg of output, benefitting both the farm business and environment.

To meet these aims, flock practices and management policies may have to be developed, changed and adapted. There are a number of points you can consider to maximise flock efficiencies pre -lambing.

This Practical Guide looks at maximizing performance within the flock, concentrating on pre lambing.

Tup fertility

Ram fertility is of paramount importance in any flock. Just because a ram appeared well the previous year, doesn't mean he has not become infertile or sub-fertile 12 months later.

Ask your vet to semen test your ram team at least 2 months prior to tupping. An infertile but sexually active ram will result in many ewes returning at 17 days in single sire mating groups. Multi-sire mating groups are best to allow sound rams to cover for infertile or sub-fertile animals. It is best to run rams in multiples of three.

Farming for a Better Climate

There are five sets of Practical Guides covering :

Use energy and fuels efficiently

Develop renewable energy

Lock carbon into soils and vegetation

Optimise the application of fertilisers and manures

Optimise livestock management and the storage of manure and slurry

Find further information, including links to other Practical Guides and Case Studies, at

www.farmingforabetterclimate.org

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Websites

www.farmingforabetterclimate.org

www.agrecalc.com

SRUC

The Scottish Government
Riaghaltas na h-Alba

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Abortion

Using vaccines to protect against toxoplasmosis and enzootic abortion (EAE) will help to protect the flock against high lamb losses and avoid weak lambs at birth. Buying in replacements from known EAE accredited flocks and vaccinating is a key control procedure. Any suspect abortions should be sent to the vet labs for testing.

What to do with barren gimmers?

Barren gimmers should be culled. This may seem a drastic measure, particularly if buying in replacement females. However, studies have shown that barren gimmers are much more likely to be barren again, or if they become pregnant, will have a lifetime of fewer lambs. There is no excuse for barren gimmers; do not give second chances.

Maximising lambs reared

Approximately 25% of eggs shed in the ovaries of sheep are lost as natural wastage. Feeding only maintenance requirements after tupping and low levels of stress are important for embryo survival, particularly in ewe lambs. Over-feeding and high feed intake, while it may seem logical, causes low progesterone levels and poor placental development.

Watch out for trace element deficiencies. Selenium deficiency is common in many areas and can increase barrenness. Cobalt deficiency and occasionally copper can reduce the ovulation rate in ewes. Take blood from a representative sample of your flock to test for trace element deficiencies. If there is a severe deficiency present, use boluses to correct it.

Pregnancy scanning

Pregnancy scanning is an excellent tool which can improve lamb survival through separate feeding of ewes. For singles, avoid overweight lambs by restricting access to forages of over 10 MJ/kg dry matter (DM). For twins, feed forages of over 10 MJ/kg DM. Trace element and vitamin E supplementation is important in this group. For triplets whose colostrum yield is normally only sufficient for twins, feed high quality forages plus protein-rich feeds, particularly undegradable dietary protein (UDP) to increase colostrum yield. An example is hi-pro soya bean meal fed at 100 g per lamb carried. Feed supplements with high levels of vitamin E. Mannan oligosaccharides can also improve colostrum quality.

Reducing lamb mortality

Most losses during lambing time can be a result of abortion or unsuccessful ewe/lamb bonding, leading to hypothermia/starvation and death. This can be due to many factors.

Birth-weight is key to maximising lamb survival as overweight and underweight lambs are more likely to die. Nutrition in late pregnancy (90-147 days) affects lamb birth-weight the most. Overweight lambs (above 5 kg) create significant lambing difficulties with both the ewe and lamb being traumatised and less willing to bond. Underweight lambs (3 kg) have a higher amount of heat loss due to their lower body mass. In both examples, lambs suffer from poor bonding to the ewe and are more likely to suffer from hypothermia, particularly the last born of triplets. A medium birth-weight of 4 kg (twin lamb) is best for cross-bred lambs.

On average, about a third of triplet lambs die except when there is a high level of skilled labour available at lambing time. Aiming for a scanning percentage of 175-180% will help to achieve a maximum amount of twins and a minimal amount of triplets born.