**Sheep Technical note, April 2013: Grass & Fodder shortage**

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## Insufficient grass

In early April the weather continues to cause problems. Grass growth is practically non existent. Even following an improvement in the weather it will take some time for grass covers to recover to an acceptable level on most farms.

If there is insufficient grass (less than 4 cm) during early lactation milk yield will be reduced and there is little option but to supplement the ewe.

## Action required by farmers

- Apply nitrogen fertiliser onto grassland as soon as possible. The nitrogen will be there to boost grass growth once soil temperatures rise. This will help rectify the situation once grass growth recovers. If P & K levels are low, a compound fertiliser will yield better results.
- In the meantime most farmers short of fodder will have to purchase additional feed (See details described below).
- If cash flow is tight, farmers should talk to the bank, local adviser or merchant.
- If there are animals on the farm intended for sale, consider selling now where it makes economical sense to do so.

## Nutritional Requirements

The main nutritional requirements of ewes with lambs at foot are energy and protein. When grass is plentiful, intake for ewes rearing twins will range from 2.4 kg grass DM from 1 week post lambing to 3.4 kg when the ewe is 7 weeks lambed.

Table 1. Grass intake (kg DM/day) by lactating ewe with twin lambs

| Lactating week | Ewe | Twin Lamb | Total (ewe+twins) |
|---|---|---|---|
| 1 | 2.4 | - | 2.4 |
| 3 | 2.4 | 0.1 | 2.6 |
| 5 | 3.2 | 0.3 | 3.8 |
| 7 | 3.4 | 0.5 | 4.4 |
| 9 | 3.0 | 0.7 | 4.4 |
| 14 (weaning) | 2.3 | 1.2 | 4.7 |

Furthermore, as lambs get older they too will increase in their grass requirements, ranging from 0.1 kg DM for a lamb 3 weeks old to 0.5 for a lamb that is 7 weeks old (See Table 1). Energy requirements for a 70 kg ewe rearing twins growing at the rate of 275 g per day are approximately 2.7 UFL. Furthermore, crude protein requirements are approximately 430 g per day. Normally, when grass supply is sufficient, these requirements can be met or exceeded from grass alone.

*If there is insufficient grass (less than 4 cm) during early lactation milk yield will be reduced and there is little option but to supplement the ewe.*

**Peak milk yield**

Twin rearing ewes reach peak milk yield approximately 3 weeks post lambing and ewes with singles will peak at about 5 weeks. It is therefore important to try to meet nutritional requirements until these dates have passed. Otherwise lamb performance will suffer long term throughout the year. Once these dates have passed it is far more practical to offer supplementation in the form of creep feed to lambs if there is still a grass shortage. It is also worth noting that generally, at a similar level of nutrition, ewes rearing twins yield approximately 40% more milk than ewes rearing singles. Therefore, special care must be taken with twin rearing ewes.


*From 3 to 5 weeks post lambing if there is still a grass shortage is far more practical to offer supplementation in the form of creep feed to lambs.*

**Scarce grass (< 3.5 to 4 cm)**

Every farm will be different so it is important to get specific advice. However, it should be useful to bear a few points in mind.

- The level of available grass varies from farm to farm.
- Sheep are able to graze much tighter to the ground than cattle.
- During very dry weather, grass dry matter is much higher than under normal weather conditions. Therefore, intake may be much higher from grazed grass than may seem obvious.

Concentrate requirements for twin rearing ewes and single rearing ewes when grass height is below 3 cm and intake is approximately one third of normal are presented in Tables 2 & 3 respectively. As the overall volume of concentrates is increased, the protein percentage can be reduced to supply the required level of crude protein. If ewes are in good condition, they may be allowed milk off their back, lose some condition and therefore reduce concentrates required. However, if ewes are already in poor condition, this is not recommended and will not work.

**No grass (< 2 cm)**

If grass heights are 2 cm or less (i.e. no grass) or quality forage is available, these levels should be increased further by approximately 1 kg concentrates for the first 3 to 5 weeks of lactation or until grass becomes available.

Table 2. Concentrate requirements for ewes rearing twins growing at 275 g/day when grass intake is approximately one third of normal.

| Ewe Condition | Grass intake | Concentrates needed | Comments |
|---|---|---|---|
| Good (CS 2.75 – 3) | 1 kg DM | 1 kg 20% Protein | Appetite will not be satisfied. Some poor quality roughage may fill this. |
| Poor (CS 2.25 – 2.5) | 1 kg DM | 1.4 kg 15% Protein | |

Table 3. Concentrate requirements for ewes rearing singles growing at 300 g/day when grass intake is approximately one third of normal.

| Ewe Condition | Grass intake | Concentrates needed | Comments |
|---|---|---|---|
| Good (CS 2.75 – 3) | 1 kg DM | 0.5 kg 20% Protein | Appetite will not be satisfied. Some poor quality roughage may fill this. |
| Poor (CS 2.25 – 2.5) | 1 kg DM | 0.75 kg 15% Protein | |

**Creep Grazing (For lambs > 6 weeks old)**

Forward creep grazing older lambs ahead of ewes has the biggest advantage when grass supply is tight. It gives lambs priority to the scarce supply of high quality grass. Allowing lambs forward graze in front of ewes will improve lamb performance as it allows them priority access to the best grass before the ewes. The ewes can be maintained on tighter grass for a longer period. Their condition can be recovered later when grass supply becomes more plentiful. It has been shown to result in lambs being 2kgs heavier at weaning. Replacing the existing gate with a creep gate that has 225mm (9 inches) spacing enables lambs to graze in front of ewes.

**Water**

With the extra dry feed being offered to sheep, make sure to supply ad lib access to clean fresh water at all times. Ewes in early lactation need up to 10 litres per day. There will be very little moisture in dry feed.