

HOW MUCH SUPPLEMENTARY FEED DO I NEED?

The following tables can help you to quickly work out the quantity of drought feed required for your planning period



Supplementary feeding aims to meet the nutritional and metabolizable energy (ME) requirements for different classes of sheep and cattle. Variation in feed quality and ME during drought conditions can affect the quantities of supplement that need to be fed to achieve a set level of animal performance.



We recommend that you test your supplementary feeds (hay, grain, and silage) as it can be much more economically sustainable for your business. Waiting 6 weeks to see that the stock are not performing is a costly exercise, when compared to the cost of a feed test. For example, if you feed above 12.5 ME, you will require a lower quantity of grain compared to feeding 11 ME of grain (Table 1).



SHEEP

Table 1: Tonnes of supplementary feed needed to feed **1000 dry ewes at maintenance for 1 week**

	12.5 ME grain	11 ME grain	10 ME 40% DM silage	9 ME hay
Merino 50kg	4.2	5.0	12.7	7.5
Merino 60kg	4.8	5.7	14.5	8.3
First cross ewe 70kg	5.3	6.3	16.1	9.0
Composite 80kg	5.9	6.9	17.4	9.3

Note – Additional straw should be made available for stock being fed grains. Roughages below 9 ME will result in weight loss for all ewes and can lead to health issues.

Table 2: Tonnes of supplementary feed needed to feed **500 ewe lambs for 1 week at listed weights and daily growth rates (gm/day)**. The supplement is 85% (12.5 ME) grain and 15% (9 ME) hay. Male lambs would have a higher growth rate for the same quantity of supplement.

Lamb from 50 kg merino ewe					
20 kg lamb	100 gm/d	2.35	30kg lamb	100 gm/d	3.01
	150 gm/d	2.94		150 gm/d	3.68
Lamb from 60 kg merino ewe					
20 kg lamb	100 gm/d	2.31	30kg lamb	100 gm/d	2.87
	150 gm/d	2.91		150 gm/d	3.57
	200 gm/d	3.50		200 gm/d	4.10
XB or composite lamb					
25kg lamb	150 gm/d	2.91	35kg lamb	150 gm/d	3.36
	200 gm/d	3.50		200 gm/d	3.92
	250 gm/d	3.99		250 gm/d	4.48

Note – a heavier weaned lamb will require a higher supplementary feed due to higher ME requirements.



The general target growth rate for a weaned heifer is **0.7kg/day (Ag Vic)**.

You can take these weekly figures and multiply by the number of weeks you plan to feed, to work out your estimated supplementary feed requirements.

Table 3: Tonnes of supplementary feed needed to feed **100 cows at 2 stages of pregnancy, 120 days and 200 days for 1 week**. The ME of the grain is 12.5 and the hay 9 ME.

Weight of cow (kg) and stage of pregnancy	80% Grain, 20% Hay	10 ME (40% DM) silage	9 ME hay
500 kg cow 120 P	4.31	9.78	4.89
500 kg cow 200 P	4.72	10.64	5.05*
600 kg cow 120 P	4.93	11.23	5.8
600 kg cow 200 P	5.45	12.27	6.1*
700 kg cow 120 P	5.50	12.61	6.52
700 kg cow 200 P	6.15	13.85	7.04*

* At 200 days pregnant the hay at 9 ME results in weight loss for the cow (it is losing condition); 1.1 kg/wk loss for the 500 kg cow, 0.7 kg/wk loss for the 600 kg, and a 0.3 kg/wk loss for the 700 kg. A hay of 9.5 ME is required to maintain the cow's weight.

Table 4: Tonnes of supplementary feed needed to feed **100 heifers for 1 week at a weight gain 0.7 kg/day**. There are 3 weights of mature cows and 2 weights of the heifers. The ME of the grain is 12.5 and the hay 9 ME.

Weight of cow (kg)	Weight of heifer (kg)	80% Grain and 20% Hay (tonnes)	10 ME 40% DM silage (tonnes)
500 kg cow	150	3.36	7.63*
	200	4.0	9.7*
600 kg cow	150	3.3	7.66
	200	3.75	9.3
700 kg cow	150	3.2	7.56
	200	3.7	8.9

*These heifers are growing at a max of 0.6 kg/day due to limitation of supplementary feed and having the calf come off a lighter cow (genetics).