Australian Soil Planners PTY LTD

**Suggestions/Recommendations for Dry Times (May 2024)**

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1) Barley straw is better than wheat straw and wheat straw is better than nothing. If you have wheat straw you need to add more to get it to similar quality as barley straw. Advice from the "Feeding and Managing Sheep in Dry Times" book states - *Dissolve 10kg urea + 2kg sulphate of ammonia + 2L molasses in 200L water. Apply mix at 450L/per tonne of straw. Eg if straw bale weighs 350kg apply the mix at 160L per bale. Lay bale on its side for best distribution.* The treatment will increase a 3 per cent protein straw to a 6 or 7 per cent protein equivalent.

   For simple math, you need 4L molasses + 20kg urea + 4kg sulphate of ammonia per tonne of straw. The molasses is there to aid palatability and to give an external energy boost/kick to the microbes in rumen as these are the guys doing all the converting. Molasses doesn't offer much in the way of energy for the animal – grain is a cheaper source.

2) Grain has low calcium content and so a dry lick containing the key macros – Ca, Mg and Na is critical to avoid hypocalcemia in lactating animals. Hypocalcaemia is the most common calcium disorder of lambing ewes. During pregnancy and the first few weeks of life, the lamb is entirely dependent on the ewe to provide calcium to build strong bones.

   The peak demand for calcium by the lamb is at 10 days of age, but that demand on the ewe steadily increases from midway through pregnancy, as the lamb's bones begin to calcify.

   It is the bone development of the lamb that determines future bone calcium storage. The bones are a major source of calcium for the ewe to provide the lamb. During pregnancy approximately 20% of the ewes' total bone calcium is mobilised to supplement the calcium in the diet to meet the lamb's demand for calcium. This demand on the ewe's bone stores increases to 70% in early lactation with the remaining calcium coming from pasture. Inadequate calcium supply by a ewe to her lamb means the lamb has lower bone calcium stores, and as an adult will be more at risk of hypocalcaemia when lambing, perpetuating the risk into the next generation.

3) When the season breaks, the soil will be cold meaning there is going to be little mineralization of nutrients by the soil microbial community. Water soluble

phosphorous is going to be critical to get the plants to grow roots fast. P is a like the battery on a solar system. It stores the energy from photosynthesis to drive plant growth.

4) Another problem to watch in cold soils are red legged earth mite. They will be sucking like mad on the tiny seedlings hampering growth.

5) Perennial C3 grasses eg Phalaris, cocksfoot, fescue, veldt are your best friend after a late break as they already have a root system and they can power off as soon as they get moisture. Defer grazing these as long as you can withstand eg 2-3 weeks to get as much of a feed wedge going into winter.

6) Dry sow fast growing grasses – whether it be ryegrass (eg Verdure, Vortex, Prine at a solid rate), barley, oats, cereal rye. Personally, I think its too late for sowing brassicas. Grasses, being a larger seed have more energy stored in them and can power off. Cereal rye is the quickest early feed out there but it will go stalky once it runs to head = better for cattle when this happens. The ryegrass option can be used later in the season for hay or silage.

7) Use gibberellic acid (Pro Gibb) and nitrogen to grow extra feed once the season breaks. The best bang for buck is grassy pasture especially phalaris. Gibberellic acid doesn't grow any extra feed over the course of the year – it just brings it forward – eg you will have less spring growth in that paddock but the other untreated paddocks should be cranking anyway. Reminder – prioritise grassy pasture. You'll need about an inch of grass to get best results.