



## Laying Foundations

No one would dispute the old saying that preparation is paramount to success; and success is more about doing the right things than doing things right.

There are two essential elements to successful dairy farming: firstly, preparing the cow for lactation, and secondly, preparing the farm to supply the necessary feed to ensure the cow has every opportunity to produce to her genetic potential.

Both these elements are directly related to the two drivers of farm profit: litres per cow and tonnes of dry matter harvested per hectare, and both for the same reason. There is a fixed cost to keeping a cow; maintenance, which does not alter whether she produces 1000 litres or 10,000 litres. That fixed cost is in the vicinity of \$1000/cow/year. Or put another way, she must produce 2,500 to 3000 litres to pay her board. Only after this does she start producing profit.

Obviously, the more litres she produces the smaller the percentage of her milk income is consumed by maintenance cost, and therefore, the more profit she produces. The argument that the feed cost to produce higher levels of milk is not profitable is an 'old wives tale'. It had no substance at 24c/litre, and has sunk further into oblivion under current milk price. My monthly calculation of Milk Over Feed Cost (MOFC) for my clients bears powerful testimony to this. This assumes a balanced healthy ration.

Similarly, there is a fixed capital cost to each hectare that must be paid before we start making profit from our considerable investment in land, either owned or leased. If we took a nominal value for dairy land of \$12,500/Ha (\$5000 acre) at 5% return on investment, each Ha is costing \$625/annum alone. At the average 'tonnes of dry matter harvested' for Western Victoria (dry land) of 4 tonnes, our grass has cost \$156/tonne DM. Add to this, say \$600/Ha for fertilizer, fencing seed etc, we have a pasture cost in the vicinity \$300/tonne DM harvested.

Needless to say, any increase in tonnes of dry matter harvested/Ha substantially reduces the cost of pasture and hence increases farm profit. By increasing investment in seed, fertilizer, weed control etc, but perhaps most importantly, grazing management – anything that will assist to grow and harvest more pasture, will certainly drive profit. On any given dairy farm, these two profit drivers, litres/cow and tonnes of dry mater, go hand-in-hand. Increasing pasture consumption per cow through increased pasture availability, and using a variable grain mix as a balancer for energy/fibre/protein will achieve both ends contributing significantly to farm profit. At current milk price there has never been a better opportunity.

Let's start with pasture production. I state here that I am not an agronomist; however I do observe a lot of pastures in my work and ask a lot of questions of some of the best pasture growers in Victoria. I also ask questions where I see poor results.

Laying foundations for good pasture production must start now with plant density. Most pasture lost considerable plant density last year as a result of drought – we must restore/increase plant density or fertilizer efficiency (dry matter grown per dollar invested in fertilizer) will be compromised, and weeds will thrive.

In consultation with your agronomist/seed supplier, I strongly recommend direct drilling every acre not being re-pastured, with annuals in mid March. This will fill in bare ground, reducing weeds, and giving every opportunity to utilize fertilizer and increase quality pasture for grazing and boost silage yield in spring.

Now that we have done our best to increase plant density, feeding plants is as important as feeding cows. I am convinced our pasture plants, like our cows, have genetic potential to produce far in excess of the current average yields, and are handicapped by poor nutrition. The most productive pastures I see have plant density and are fertilized monthly with complete fertilizer (NPKS) – small amounts often! The principle is to feed the plant not the soil. It reduces leaching and run-off, is water soluble and readily available to plant roots for up-take in soil moisture. It's the same principle we work on with urea application.

The other major contributors to dry matter harvested are; firstly grazing management through the season, secondly harvest management in spring and finally, summer fodder crop production. The second and third issues I'll deal with at their appropriate time. Well fed plant genetics thrive on being grazed. Short rotations (21 days) on dense pasture fertilized monthly with complete blends (120 kgs/Ha NPKS monthly) will optimise pasture growth and quality.

Preparing cows is about restoring body condition and mineral reserves over the last 100 days of lactation. A ration that optimises milk production at this stage will also apply the necessary weight gain and restore calcium and magnesium reserves in the skeleton and trace minerals in body fat reserves. Ad-lib silage, 5 kgs of a grain mix with wheat, canola meal (20% - 25%), salt, lime, MagOx and rumen modifiers (Rumensin/Tylan) for optimum feed utilization and rumen pH management, supplemented with 4 kgs DM rape/turnip crop will not only have cows milking very well, but supply weight gain and mineral replenishment ready for calving.

It is essential this is complete by dry off so cows remain stable in weight during the dry spell. Any increase or decrease in weight while dry will expose the cow to calving problems by degree in line with weight change, and proportionately impact on lactation potential. I will address dry cow and pre-calving rations next month.