



Silage is a Profit Driver

At the time of writing this article I'm in the midst of preparing feed budgets for my clients. I began doing feed budgets several years ago to emphasise just how much feed we need to fully feed a herd. August is the perfect time for planning summer fodder crops, and to present the dairy farmer with a silage tonnage required to ensure maximum production through fully fed cows.

Most farmers are stunned at the quantity of feed we need to achieve this. Crop Ha's and tonnes of silage are usually well in excess of anything they have done in the past, so the feed budget becomes a crisis document causing farmers to view silage making from a very different perspective – exactly my intention!

There are two drivers of dairy farm profit: 1) tonnes of dry matter harvested per Ha per year (both grazing and machine), 2) litres per cow per lactation. Both these paradigms are based on the same inescapable fact.

The major cost of pasture is the capital cost of the land it is grown on. Obviously the more pasture we harvest (grazed or machine) off any given acreage the more we dilute the capital cost factor, and this capital cost factor has doubled in the last 5 years. We would not accept investing our capital anywhere else for a zero interest rate, yet this is exactly what many farmers are getting from their farm capital.

The dry matter harvested per Ha average for dryland dairying areas is around 4 tonne/Ha, yet there are farmers achieving 8+ tonne DM/Ha. Needless to say, at 8 tonne DM/Ha pasture cost has dropped very considerably, or profit has risen significantly.

Similarly, there is a maintenance cost attached to owning a milking cow. This cost is in the vicinity of \$900/year. At 3000 litres she has just covered her board and lodging. With the state average around 4500 litres many farmers are living off their capital. Again, as with pasture DM yield, the cow producing 8000 litres is very profitable.

This brings us back to the pasture dry matter issue, and in particular silage harvest. To achieve an 8000 litre average across the herd we need to meet the demands of the feed budget. Most herds 'lose it' from Christmas onward with production drops well beyond what the cow is genetically capable of sustaining. We should only drop 1 litre/ month from peak milk (around 80 to 100 days in milk) to dry off. If the feed budget is met with low cost home grown forage (silage & crops) and complemented with grain to balance fibre, energy and protein, optimising intake, 8000 litres is quite achievable.

Generally, peak milk objectives have been ravaged this year from lack of feed, and hence, very underfed cows.

Silage making is our best opportunity to both meet feed budgets and in so doing lift dry matter harvested per Ha, and hence profit from both milk production and capital.

We grow about 60% of our pasture in just 15% (7 or 8 weeks) of the year. This really is a window of opportunity! How we manage pasture over this short period has major ramifications to the whole year's farm performance and profit. This is the time when we can close the gap between the 4 tonne DM/Ha average and the 8 tonne DM/Ha goal.

Certainly the farmers harvesting 8 tonne DM/Ha have a 5 year pasture renovation program, drill annuals into 3 year old pasture to maintain plant density, have aggressive fertilizer regimes (monthly applications of complete fertilizer), and staggered-planting summer cropping program to supply a constant 4 to 5 kgs DM crop/cow/day right through summer; but the real key is silage harvest.

In southern dairying areas silage harvest should start mid September, wet paddocks being the only limitation. Don't wait till pasture is in front of cows, you are 2 weeks late. Growth rates from mid September can only increase. For those who do bulk silage, start with baled silage until there is enough area ready for bulk. Bales done with a rotor cut baler will feed out in bulk equipment.

Bale, wrap and cart in a day and apply urea the next day and the paddock will be back in the rotation in 14 days in a reasonable spring. As time passes increase the area cut each week in accordance with growth rates. I would be bold enough to say most farms could near double their silage harvested with this level of aggressiveness. It's about planning, organising and managing, not luck!

Silage inoculant is the greatest tool to assist in both aggressive harvesting and quality silage. Inoculant will allow you to close the gap between cutting and baling. Tedding is essential, but we can very successfully ensile at higher than optimal moisture content (65%). With shorter cutting to baling time we are less at the whim of weather in deciding when to cut. This enables cutting at optimum nutrient stage (40% NDF) or as close as possible, which in turn will optimise regrowth – a major factor in DM harvested.

Quantity of silage is legacy of quality, contrary to popular belief. If we cut at 40% NDF (grazing quality), we will, inline with above fertilizer etc, have rapid regrowth increasing total dry matter harvested. The paddock left to traditional "lock-up" stage will be white after cutting and take 6 weeks to regrow if it doesn't run out of moisture in that time. It will also be far less dense than the early cut pastures further eroding harvest potential.

We must break the attitude that silage making is about conserving surplus fodder in spring, and replace it with "a window of opportunity" mentality to increase productivity and profit. Silage making must be seen first as a tool for managing pasture quality, the first criteria to quantity. The highest yielding farms also harvest the highest quality silage – they go hand-in-hand.