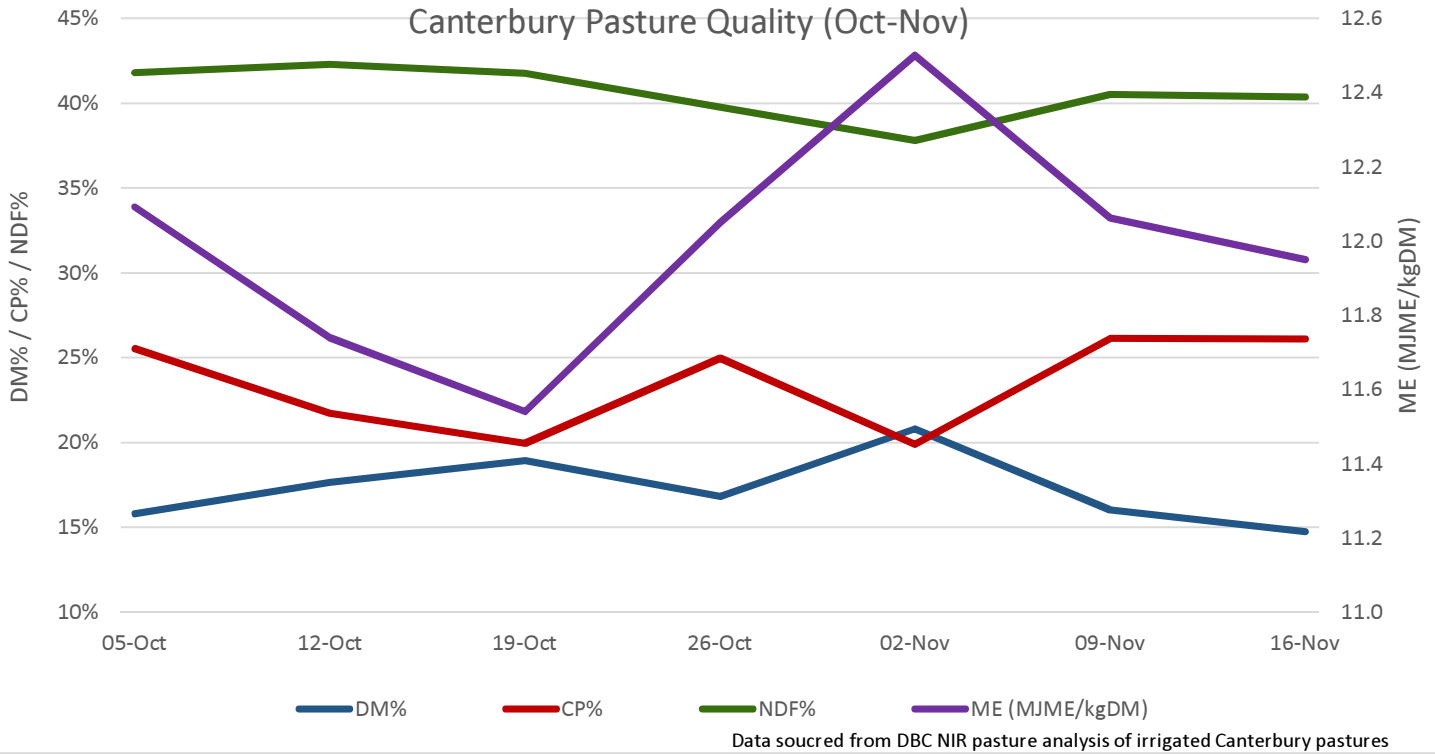
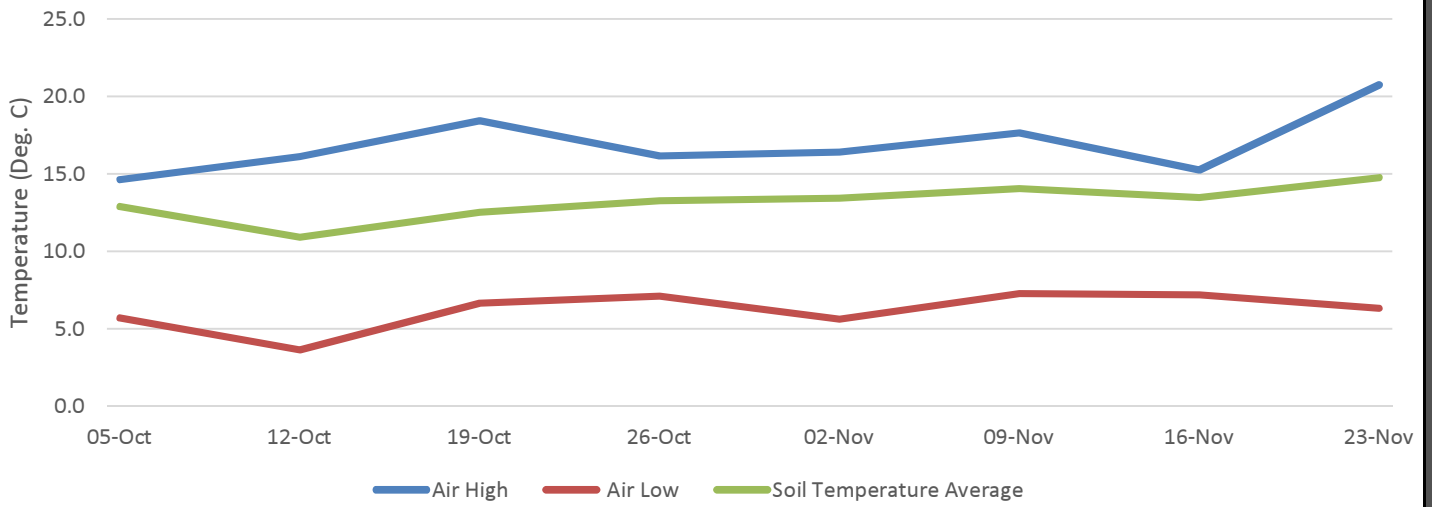


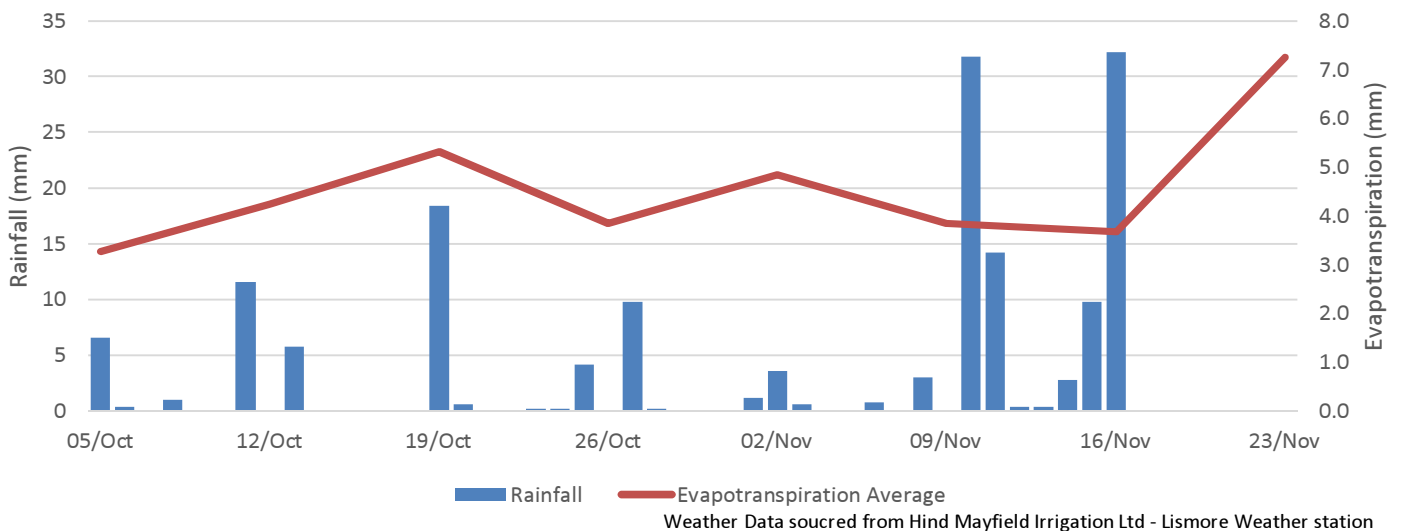
Canterbury Pasture Quality (Oct-Nov)



Average Weekly Air & Soil Temp



Daily Rainfall & Average Weekly ET



Pasture Quality Trend (November 2016)

We have had plenty of moisture this spring, which has been fantastic for pasture production and savings on irrigation costs. However, despite the amount of pasture we have had around us, the cows have not fired, milk production is back, and we cannot get pasture intake up to levels we would normally expect. Many farmers have commented that the grass “has no guts to it”, this article hopes to explain some of what has been happening in the pasture.

Dry Matter (DM) (%)

DM% has been low over the last 8 weeks with most pastures being less than 20% DM. There has been a combination of factors that have resulted in this, firstly the vegetative growth of the pasture naturally has a higher water content. However, this has been increased by the cloudy, grey days we have had. The low DM% will be limiting intake, and will count towards why some herds have been frustratingly low in production to date. Pre-graze mowing is of limited benefit when the day is wet as you will get limited wilting, and lose more in quality than you gain with increasing DM%.

Crude Protein (CP) (%)

Crude Protein has maintained numerically good levels, from 20-25%. However, because of the weather we have had, the cows have been milking as if their diet is much lower in protein. This is a result of the hidden non-protein nitrogen (NPN) in the CP%. As CP% is roughly the N% x 6.25, there is no account for the different fractions of protein; or the N that is not incorporated into plant protein and just nitrates sitting in the plant cells. The lack of sunshine has meant that plants have not been as able to convert this N to protein, resulting in a high level of NPN, and low rumen degradable protein. This has simulated a protein deficiency in some higher production herds, while boosting the milk urea levels to up over 50 in some extreme cases. The excess NPN must be converted to urea and excreted by the cow, this comes at an energy cost too, which has also been lacking in the grass.

Neutral Detergent Fibre (NDF) (%)

NDF levels have been frustratingly high, potentially due to the warm winter we had, so the grass did not ‘reset’ as we usually see. NDF has been 40% and above for the most of spring, not the 37-38% we are used to. High NDF means that pasture will be of lower degradability, and cows will not be able to fit as much in. In short, cows will eat less, of a lower quality feed. This has contributed to the lower production we have seen in a number of herds, as farmers struggle to get the pasture into the cows, whilst swimming in grass. Heading forward we are into the seed head stage and NDF will continue to climb. Meeting residuals now is important to maintain quality. Forcing cows to clean up paddocks will further limit production, utilise the mower.

Metabolisable Energy (MJME/kg DM)

ME has been low, the lack of sun has limited the plants photosynthetic ability and a lack of soluble sugars and lowered ME is a result. This has compounded the issues some farms have had with excess NPN and high NDF. Concentrates to properly balance what is missing in the pasture are still an option to increase production as we get through peak production to make the most of the forecast pay-out that has been announced.