10th November 2015

DoloZest® News

07 362 7288 or 0800 843 809 www.esi.org.nz
Functional Fertiliser Ltd

Why permanent grazed pasture is the ultimate crop

Prices at the Dairy Auctions on the 3rd of October declined 7.4%, Fonterra has requested PKE levels be restricted to 3kg/cow/day, and moves are afoot to limit the level of urea in milk.

Whether the motives are to restrict milk production in order to lift prices, or pressure is coming from customers for improved quality is unclear, however if Fonterra is to make major gains in prices they receive, products require a point of difference, and that is **they are manufactured from milk from predominantly pasture based systems.**

The same applies to sheep and beef. NZ requires a point of difference if a market that pays a premium is to be developed and maintained. More money is only achievable if greater value is provided and purchasers are becoming increasingly selective.

Product from animals grazing highly digestible nutrient rich pasture tastes different and is sought after by customers world-wide that have the money to pay the extra. Regardless of economic fluctuations those that presently enjoy high quality food will continue to do so, and New Zealand has the resources to demand a larger chunk of that pie.

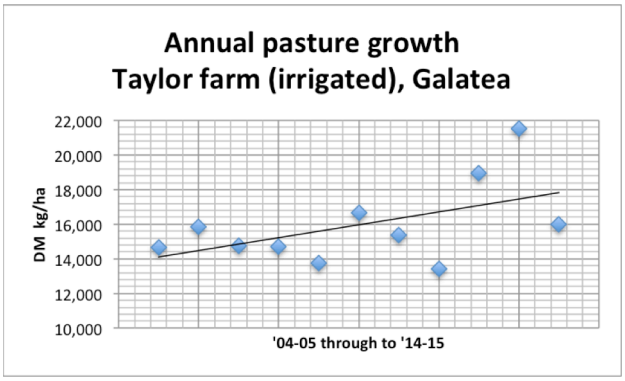
Our permanent pasture based on perennial grasses and clover did not happen by accident but by design. They were developed as a low cost system that allowed us to compete with countries producing the same products, without the disadvantage of being a long way from market.

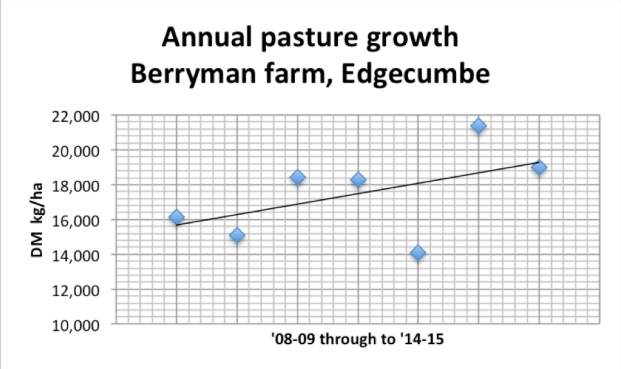
With a relatively benign climate we have the ability to efficiently covert sunlight via photosynthesis into meat, milk, wool, and a range of associated products.

There is absolutely no sense in mimicking production systems from Europe and attempting to compete with them in their own market place. A large chunk of the production cost is determined by land values, and our land is as dear as most, and more expensive than many.

Our advantage lies in the ability to continue to develop low cost permanent pastures that sequester carbon, build humus, with the potential each year to grow more.

No-one as yet has disagreed with the premise that pasture production here has steadily declined over the last thirty years, but declining growth is not universal. There are properties where the opposite is the case and those measures are contained in the following graphs.

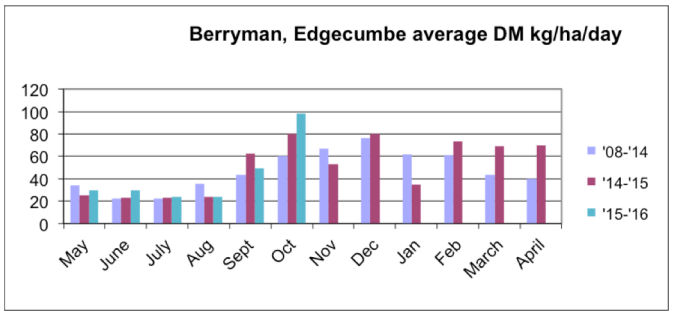




October growth rates

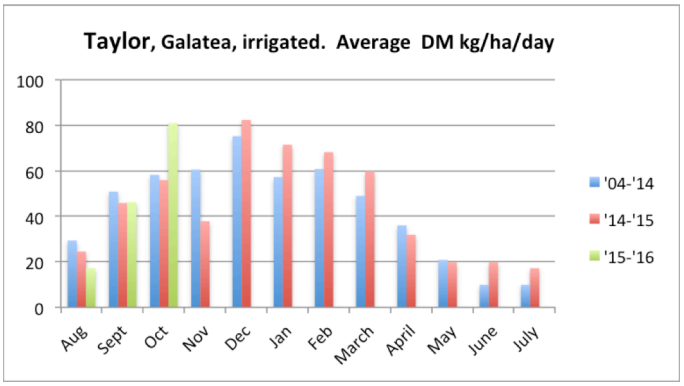
Cold dry winters are usually followed by exceptional springs and often early growth. This hasn't been apparent this spring until the cutting, drying, and weighing of October growth, as shown overleaf.

Given these numbers there are three possible reasons for the properties not having the surplus that could have been expected this season.



Firstly growth during September was close to the long term average and only in the last 30 days have growth rates markedly exceeded the 55kgDM/ha/day maintenance rate.

The interval between cage cuts was 31 days which is longer than the usual 25 day grazing interval, and in slower growth conditions the longer interval is advantageous.
The grass growth curve in the last DZ News provides the reason why.



With dry conditions during winter the utilisation of pasture was generally high, and with less leaf the initial recovery phase was longer than in wetter conditions.

Soil temperatures are still relatively low for this time of the year. However where the interval between grazings has been able to be maintained at a genuine 25 days, a surplus has been achieved.

<u>Grazing management from here.</u>

Unless substantial rain arrives regularly, growth rates over November and December in the Waikato and Bay of Plenty will decline, and the pattern appears similar in most other areas we work.

Slowing pasture growth demands extending the interval between grazings. Unless this can be achieved, the result of shortened intervals will lead to a dramatic and sudden feed deficit in early summer.

Experience over close to thirty years has resulted in a 'rule of thumb' grazing interval of 30 days being the optimum by the end of December. It's not always possible for a range of reasons but the principle is sound. 30 days between grazing means most areas will be grazed only twice between the end of December and when autumn rain arrives; and over January and February some rain and growth is likely.

Should soil be really dry entering March and no rain likely the decision can be made then to reduce animal numbers, dry off some or all lactating animals and set up for next season.
The average dry matter content of the October pasture cut was 20%, considerably less than the 25 – 30% dry matter content of summer pasture. Hay as a comparison is 85% dry matter. This means that although covers may appear lower than desired in summer, the amount of useful feed will be greater.

Should rainfall over summer be sufficient for higher than maintenance grass growth, light crops of highly nutritious hay can be made. And in our view high quality hay is really valuable winter and spring feed, while silage made from rapidly growing high protein early season grass is the perfect supplement in a dry summer.

Growing and managing pasture is based on understanding the science behind seasonal grass growth but perfecting the art comes from experience gained over years of careful observation and questioning. The saying, "grass grows grass" has never been more pertinent.

We are really appreciating client's comments about the exceptional health and performance of stock this spring along with the observation of large leafed long-stemmed clover increasingly apparent.
Regards,