Performance for profit

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Abstract: *"Kilcooly" is a 700 ha grazing operation in the central Tablelands, NSW between Oberon and Lithgow (850–1000 m), with about 600 ha being pasture improved and regularly fertilised. This paper describes how they address the winter feed gap problem in their cattle enterprises and the positive effects it has on their beef cattle operations.*

Key words: Merino ewes, Angus cattle, winter feed, protein and energy supplementation

We run a 700 ha grazing operation in the central Tablelands between Oberon and Lithgow, New South Wales. It is undulating to steep country with a light granite soil and an elevation of 850–1000 m. Approximately 600 ha are pasture improved and regularly fertilised. The remainder is native pasture and timber.

View across some of the paddocks on "Kilcooly".

We run fine wool Merino ewes joined to terminal sires to produce a first-cross fat lamb and a self-replacing herd of Angus cattle. The best of our Angus cows are joined to Angus bulls to produce replacement heifers and feeder steers. Some older and lower performing cows are joined to Charolais sires to produce domestic or trade vealers sold at 9–10 months straight-off their mothers.

All cows calve in August–September. Angus calves are yard weaned at 5–6 months and the cows are then bulked up into larger mobs. Weaners graze the paddocks first then the cows follow behind them. This grazing strategy achieves several objectives:

1. Weaners have the best of the available feed so they continue to grow and gain weight.
2. More paddocks can be rested to grow feed for the coming winter.
3. With the dry cows we can apply more grazing pressure to the paddocks that need it.

Mob of Angus cows.

Some paddocks, particularly in a good season like 2010–11, can become grass dominant. If excess plant growth is not removed in the autumn, subterranean clover does not receive sufficient sunlight and moisture to survive. We need to encourage our legumes so we are in effect manipulating plant species simply by the way we graze the paddocks.

After weaners have been taken out of a paddock and before cow have been put in.

Paddock after the cows have been removed.

We monitor the condition score of our cows. Any that are in danger of falling below 3 score, we move onto better feed. The cows only have available to them poorer quality feed as the weaners have had the best of the paddock. Some cows will lose weight i.e.: –

1. Cows that weaned a heavier calf than the average and are in lighter condition at weaning time.
2. Heavily pregnant cows.
3. Younger cows (under 4 years-of-age) still trying to grow and cut teeth.
4. Poorer performing cows.

We do not drench our mature cows. Young cows are drenched up to 3 years-of-age then we try to encourage their natural immunity to internal parasites.

In our part of the world 70–75% of the feed we grow occurs in the three months of the year – October–December. We seem to always face a winter feed shortage from mid July–September (Figure 1) so fodder budgeting is an important part of our management. To help address the feed shortage we drift our calved cows from their mob to an adjoining paddock with more feed. Thus saving the pasture for when it is most needed and rewarding the more fertile cows that calve early.

Generally, over winter, our weaners gained around 250–300 g/day. We were not too concerned about their performance. We just waited for the spring flush and compensatory gain. We now believe this was wasting precious time. In the early 1990s, we changed our management of weaners over the winter period. We were keen to capitalise on what seemed to be a price premium for feeder steers from late July to early September (Figure 2). We needed our steers to be >400 kg at 12–13 months-of-age to qualify for this price premium.

We also want our heifers, or as many as possible, to be joining weight by September. We join our heifers three weeks before the main herd. The reasons for this are: –

1. We can better utilise our bulls that are below average for birth weight but above average for growth and carcase traits. These bulls are joined to the heifers for three weeks then they are removed and joined to the main heard. A backup bull replaces them for a further three weeks.
2. Calving heifers three weeks before the herd gives us more time to supervise their calving. As they calve we ear tag the calves with our management tag (recording the dam's number and the sire). We then move them to an adjoining paddock with better feed. Only in-calf heifers remain in the calving paddock. This simplifies things and prevents potential mis-mothering.
3. As a rule, first calving heifers wean a lighter calf than mature cows. Calving earlier gives the heifer's calf a better chance to be of similar weight to the mature cow's calf. The more animals we have of similar weight at marketing time, the better – more to select from and cheaper transport costs. Each year there will be some steer weaners from these heifers sold with the first feeder steers.

Ten month old Angus weaners steers averaging 310 kg.

4. Calving heifers earlier gives them an extra three weeks recovery before being rejoined 'in-sync' with the main herd.

To achieve this we needed to increase the performance of our weaners over winter. Our frost-affected winter pastures were sadly lacking in protein and energy. Cropping was not considered an option because of our already established pastures and the topography. So we tried to secure a protein and energy source that will most economically do the job. We have used silage, grain and protein meal. We are mindful of the aim to supplement the weaner's requirements, but not to completely replace them and so protein meal is a good option. When we calculated the gross margins for the feeding of the weaners the profitability was marginal at best. Weaners consume about 1.5–2 kg/head/day costing about 50 cents/head/day. They gained an extra 200–250 g/head/day so it was about breaking even.

However, the positive influence on performance and profitability to our beef cattle operation was another story;

1. Firstly our better steers are up to feedlot entry weight by late August early September (in an average season). Hopefully, catching any price premium that may be available. Regardless, they are out the gate and gone sooner leaving more feed available for the remaining cattle.
2. The remaining weaners are heavier, healthier and much better equipped to more efficiently utilise the spring pasture growth. Making them saleable much sooner.
3. Our heifers are up to the joining weight earlier. Those that are pregnancy tested empty are heavier and return more at point of sale. Those that are pregnant are closer to their mature weight at calving (which I believe helps their conception rate at the next joining).
4. Having sold the weaners earlier more feed is available for the cows and calves.
5. Last, but by no means least – surely our objective to produce high quality beef is enhanced by producing animals that have never had a set back in their lives.

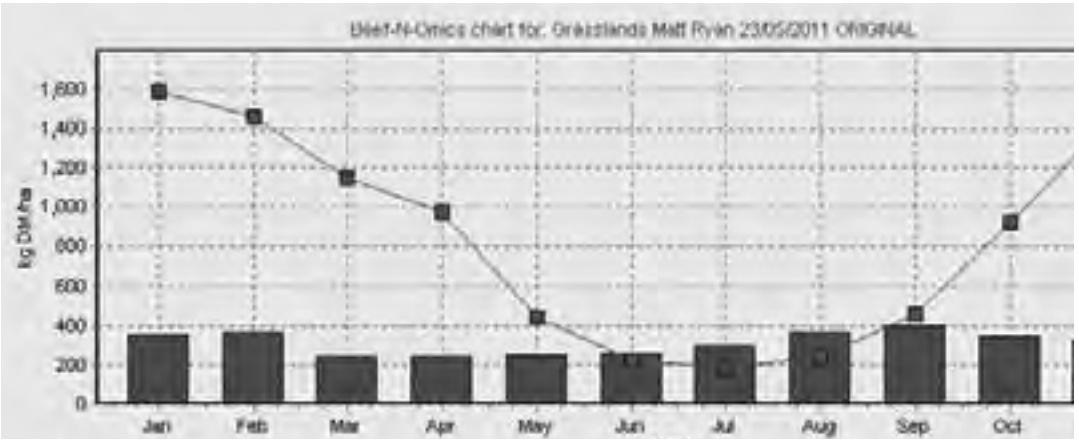

Figure 1. Pasture growth curves in comparison to livestock requirements on "Kilcooly".

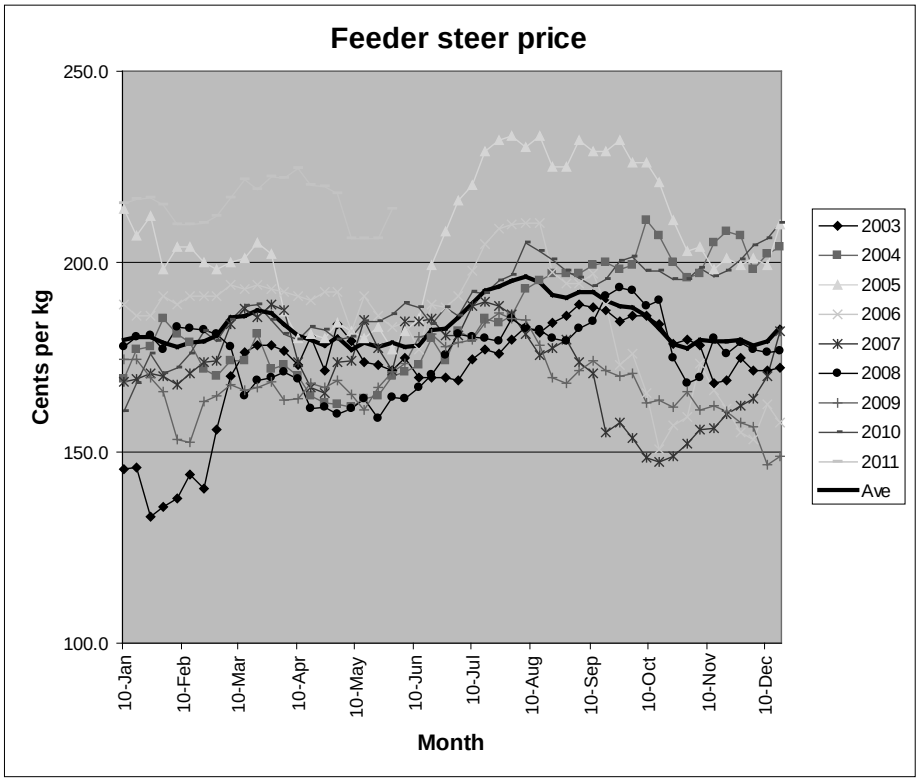

Figure 2. Weekly feeder steer price from 2003 to 2011 and the average over this period.