

Backgrounding and guaranteeing targets

"Woodlands"
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Session 3b

*Editors Note: This is a copy of the 2002 paper delivered by Allan.
He has since left "Woodlands" and consults in this field.*

Our operations

What does it take to run a profitable steer fattening enterprise?

How much production is possible in my system?

How can I maximise production and have my system remain sustainable in the longer term?

These are questions I am asking myself on a regular basis nowadays. And it seems to me that we all need to be asking these sort of questions if we wish our enterprise to provide us with a reasonable standard of living that is the result of longer term profitability.

Think about your own circumstances. How many landholders do you know around you who are struggling to keep their heads above water? Perhaps you are!

What I hope to achieve in this paper is to raise the bar. I want to share a little of what has been happening at "Woodlands" with a view to encouraging those who are positive about their own situations to look at their own production systems and ask themselves what can I achieve, what is possible and how can I go about it!

Seven years ago we sold all our breeders and began along the road as professional backgrounders. What does this mean?

It means we run cattle that belong to other people. Really we are glorified agistors. However we get paid on performance, that is in cents per kg gained, and not on a time basis. Our main client is Rangers Valley feedlot near Glen Innes on the Northern Tablelands, but we have in the last seven years "backgrounded" cattle for many

different clients. At present we are basically running 100% Rangers Valley cattle.

Our property consists of 350 ha of highly improved red basalt. We experience summer dominate rainfall, with an average rainfall of 950mm.

We run about 500-600 in peak season and turnover approximately 600 head per annum. This equates to approximately 10-12 dse/ha on average. During peak pasture growth some paddocks will run up to 40 dse/ha easily, in fact they need these levels to remain productive. This may seem incredibly high to you but trust me it is possible. All will be revealed later in the paper.

Last year our production figures came in at about 350kg/ha of beef. It was a great season that turned dry in winter, which is good for cold country stock. I hate cold wet winters about as much as the stock do!

This year I expect our production will be quite lower simply because cattle prices and a good season have resulted in us being grossly understocked. We needed 50% more numbers in early December than what we had. I suppose you could sum up our feed situation this year as being like a yabby; all shell and no guts. Let me say this scenario is as bad as a drought financially. There is no money in 5 tonnes of dry matter to the ha with 60% digestibility. More of this later!

Our pasture base for our operation includes approximately 75% highly improved, 10% short term high performance, 10% native, and 5% timbered and gorge. (See Table 3b-1 below).

Table 3b-1. Pasture break-up on "Woodlands" - 350 Ha

Permanent Pasture Mixes - 300 Ha	
A	Aust. Phalaris, Currie Cocksfoot, Vic Perennial Ryegrass, NZ Clover
B	Demeter Fescue, Aust Phalaris, Currie Cocksfoot, NZ White Clover
Medium Term High Performance Pasture Mixes - 20 Ha	
A	Concord Ryegrass, Conquest Tryegrass, Kangaroo Valley Ryegrass, Porto Cocksfoot, NZ White, Haifa White, Cowgrass Red, Puna Chicory
B	Puna Chicory, Roper Ryegrass, Cowgrass Red, NZ White, Haifa White
Natural Grass Mixes - 300 Ha	
A	Poa Tussock, Red Grass, Danthonia, Microlena, NZ White Clover

Our pastures are a mix of permanent, semi-permanent and natural. Our natural grasses are in those areas that are not arable or that are timbered. Really there is not much more I can do to improve the species content of our pasture base other than sod seeding something like puna chickory or perhaps lift protein levels in mid to late summer.

In my experience the best growth rate you can hope to achieve on a year round basis is 0.6 – 0.7kg/day, and even this takes some doing. I have talked with a number of feedlots in regards to the performance of their backgrounders, and the best growth rate I have heard of for any length of time is 0.8kg/day. This producer was situated in a warmer area and had 400 Ha of irrigated pasture. Sure there are times during the year when you can expect growth rates to be much higher than this. We've had individual animals that have done up to 3kg/day for an eight week period, but this is the exception rather than the norm.

In our own operation we averaged a fraction under 0.6kg/day (on the basis of full on farm opening weight to processed feedlot entry weight) over the last twelve months in what was a pretty reasonable season. Most of the cattle we turned over in that time were taken on as 10 month old weaners. There is no doubt we could make our yearly averages look a lot better if we limited our cattle intake to September through to December. That way we would be making full use of our higher growth season, and the cattle would also be older yearlings and capable of higher growth rates. Table 3b-2 gives an indication of how month of arrival can effect rates of growth. This can change depending on the age of cattle at arrival, their genetic potential, and their fat score. However, this is a general pattern we have noted from year to year.

Table 3b-2. Average growth rate of steers on "Woodland" by month of entry.

Month	Wt Gain kg/hd/day
January	0.45
April	0.52
September	0.96
October	0.81
November	0.62
December	0.55

The upshot of this information is that we have to take a big picture view here. Rangers Valley's backgrounding operation was set up to give them the opportunity to access better genetics across the market and to attempt to level

out supply shortfalls. There is no doubt that Rangers Valley looks for cooperators who are committed to accepting their cattle regularly. They then expect their backgrounders to deliver these cattle within specifications, and to adapt to their management practices accordingly to ensure this happens.

I think one of the most important aspects of the relationship we have with Rangers Valley, is that both parties are aware of the needs of the other. The agistment scheme, as they like to call it, has worked very well for them as it has for us.

It seems to me that producers need to be aware of the role they play in terms of performance of their cattle in the feedlot. At the same time feedlots need to be rewarding those producers who are prepared to go the extra mile to have a better product for them to utilise. If this alliance is to prosper, then both parties have to be showing a profit. To me this is the bottom line.

Our Goals

Rangers Valley Agistment Cattle

Our aim with these cattle in a normal season is to turn over 600 head per year at growth rates of 0.5 – 0.6kg/day, which returns us approximately \$100/head gross. The longest period of time we like to take to achieve feedlot specifications, is ten months. Many people have commented that our growth rates aren't anything special. My answer to this comment is "What are you getting on a 12 month basis?"

In reality, it seems to me that many producers either have no idea of the performance of their cattle, or are over-rating their performance. In any case there is plenty of research that has shown that moderate growth rates in the backgrounding phase produces a more desirable feeder steer in terms of performance in the feedlot. What we try to do as backgrounders is to have our steers hitting the feedlot at about 18–20 months of age, in low 3 score condition and with a frame score of 4–6. I think for the most part we have been pretty successful in this endeavour.

It seems to me that comparisons derived from growth rates are also somewhat misrepresentative. Sure they're a guide, but let me say this: if your steers are meeting an average growth rate of 0.5 – 0.6 kg/day on feedlot entry then most feedlots will be deliriously happy. So I pose this question. What would you rather run: one steer/ha growing at 1.0kg/day or four steers/ha growing at 0.5kg/day? It's a pretty simple equation really isn't it?

Profitability is about cost effective production levels; it's as simple as that. At "Woodlands"

this is what we have single-mindedly set out to achieve.

Nutrition and Pasture Management

• Driving Production

This is where the rubber hits the road for me as a backgrounder. It is simply not possible to succeed in this enterprise if you are not committed to doing the best job possible in maximising the potential of your pastures. As we considered moving from a breeding enterprise to a fattening/growing enterprise, it was quite apparent that our pastures had to have the highest priority in terms of capital expenditure. If we were going to maximise weight gains then we had to maximise protein levels and digestibility in our pastures.

Our goal for our pastures is to improve their quality and quantity, and to attempt to even out our production for the whole year. People are often worried about the sustainability of our high input system. All I can say to this, is that at this stage we are seeing no deterioration in our pasture base or our soil test results. In fact if anything, both are improving. My biggest concern is that I avoid mining my land at all costs. I am committed to artificial fertilising because the production we are achieving does not happen on fresh air and daylight.

I have heard some of my knockers say we are just into large scale hydroponics. One of the main criticisms we received in a recent pasture competition was that our system could not be sustained. The question was asked concerning repeated high inputs and longer term soil acidity levels. In Northern New England this is rubbish. We have been developing this system for over six years and our soil acidity levels have not moved. The only thing that moves are my key nutrient levels depending on production levels.

Nutrient requirements have to be tied in to your production. When it comes to determining this, there is very little available data. In cropping areas, yield targeting and nutrient budgeting have been an established practice for a number of years now. However, when it comes to grazing enterprises there is precious little data around.

In our own system, production levels around that 300 kg/ha/year need around 250 kg/ha of single super per year to maintain P levels. We have determined this through yearly soil testing to monitor key nutrient levels. At 150 kg/year of single super our P levels went from 94ppm to 88ppm in the first year and then to 68ppm in the second year. This movement surprised me because the few people I spoke to who were prepared to say something underestimated this decline. We had to lift our application rates or

mine our nutrient base.

When we sold all our breeders, we committed every dollar we received back into developing, renovating and maintaining our pasture base. Since those early days this attitude has only been sharpened. Our practice is to apply more fertiliser rather than less. And as our production levels climb it will be imperative that we do so. I do not compromise expenditure when it comes to my pastures. (See table 3b-3) I can not afford to, they are my biggest resource.

Table 3b-3. Medium term high performance pasture production figures and gross margins - 24.05.94 to 28.02.96

- Area 56ha
- Sowing and maintenance costs - \$26,742 (\$478/ha)
- Stock turnover - 780 steers
- Net trading profit from steers - \$80,576
- Gross margin for the period - \$53,834 (\$961/ha)
- Total production for the period - 70,980kg (\$1,267kg/ha)
- Average liveweight gains - 1.10kg
- Return on investment - 100% pa

• How Much is Enough?

The biggest challenge I have with our pastures is maximising production. In the last six months we have been involved with a PPP pasture group. This has lifted my thinking to new levels and we have been able to gather some incredibly helpful information concerning pasture growth rates, production levels and feed budgeting. If you had asked me 2 years ago how much production was possible in our system, I would have said 350 kg/ha/year overall with our pastures. However with what I've learnt this year I'm starting to think 450 kg/ha/year is very achievable and it's only my level of management skill holding it back. I will also admit that to really push the boundaries of my established thinking is a little disconcerting, so some good old fashioned guts will help too!

• Our Triple P Group

The Ben Lomond group has five properties involved. Each property has set aside 2 paddocks. One control and one productivity paddock. The idea being that in the control area the paddock is grazed and managed as per normal practice. The productivity paddock is treated in a manner determined by the property owner but designed to lift production above the control paddock. The program is projected to run for two years.

For our own part we are comparing fertiliser applications. Our control paddock is receiving an annual application of 250 kg/ha of single super/Mo super/SF 45. The productivity paddock is receiving double this amount spread over two applications in late autumn and mid-summer. Both paddocks are roughly 24ha, and both are split into three roughly equal cells that allows us to follow our normal short term rotational grazing practices.

I can honestly say I have been amazed at some times and horrified at others with the results.

• The Results So Far

At this stage the differences between the two blocks are minimal as the first extra application of fertiliser is due to be applied this month. However I've still learnt heaps about pasture growth rates and feed budgeting that at times has left me horrified.

Horrified because of the amount of production we are missing out on.

Every two months we meet to do pasture composition assessments, dry matter cuts and assessment and review stocking details and feed budgets.

At our December meeting the control paddock was running 44 dse/ha and the productivity paddock 50 dse/ha. The productivity paddock had been grazed harder through winter and spring and had under half the available feed at 2600 kg DM/ha. However its measured growth rates were 50% higher which meant our projected feed actually increased to 3860 kg DM/ha. So in actual fact despite my thinking it was fully stocked, it was actually understocked! In fact it needed another 8 dse/ha to keep it at our targeted 2500 kg DM/ha. Otherwise the pasture would get in front of the stock.

• Cruelling Production!

In our control paddock the results were alarming. Growth rates were a lot lower at 40 kg DM/ha/day and even though we had 4700 kg DM/ha starting feed and stocking rates were lower than the productivity paddock, our projected feed went down to 4000 kg DM/ha. The relative feed value of this feed would also be lower because of lower digestibilities in the order of 5 – 10%. Unfortunately in this paddock the damage had been done. We had missed the boat. The sum total of this is lower production big time!!

In the next few months we are going to quantify this but already in our January weighing we have seen growth rates of the cattle in the control paddock 25% lower than the productivity paddock and overall production 57kg/ha less

or 47% for the month. This is a significant monetary loss in the order of \$50/ha for the month. In one month over my whole property, I reckon I've blown about \$5000 - \$6000 because of poor grazing management!!

Just as well I'm not a public company or there would blood letting at the shareholders meeting.

These are sobering figures for one who thought he had a pretty good handle on grazing management. Watch this space for further developments!

• Short Term Rotational Grazing

Crucial to the whole production system is the grazing method used. In the past we have used a rotational grazing system but basically it has been a long grazing period followed by a long spell. What we have now adopted over most of the place is a short graze, short spell rotation and we have found we have significantly increased production. We still have some refinements to make in getting paddock sizes smaller, but overall the system has allowed us to make better use of our pasture growth. The system is not a full blown cell grazing system because my rotations are longer and they are based on pasture assessment. So I might have a paddock split into three cells. The first cell might be grazed for one month, the next for three weeks, and the last for two weeks. What is important to me is not the number of days but the length of grass, both in the block being grazed and in the blocks being spelled.

When we first began this grazing system we did some analysis to see what level of production could be achieved. They clearly show the benefits in terms of production results. It is also interesting to note that during this year we had access to plenty of cattle. Table 3b-3 shows you the results during five months in Spring / Early Summer 1998.

Table 3b-4. The effect on production of short term rotational grazing 01.09.98 to 31.10.98.

Paddock size	24ha
Cells	3 of 8ha
Stocking rate	25 dse/ha
Growth rates	0.8kg/dy/ha
Production	300kg/ha l.wt. or 49kg/ha l.wt./ 100mm rainfall

In the future if we are going to push the limits of production then this kind of grazing system is going to determine our success. There is no doubt it is more intensive in terms of

labour, and this is something I battle with because of the demands on my time of a large off farm business, but it allows great scope for cost effective increases in production and maximisation of income potential and grazing potential. I would not recommend it to anyone who is not in a position to conduct weekly or fortnightly assessments.

Planning the Feed Year

This is an area that I have concentrated on in our operation. In the past we seemed to making decisions too late. Either it was dry and we should have lightened off a month ago, or it was a bumper season and we should have had more stock on a month ago. What it comes down to is planning.

Feed Budgeting

It seems to me that to get the most out of our short term rotational system you need to have a handle on feed budgeting. Feed budgeting takes time but it gives you the ammo to make decisions ahead of time. It also allows you to plan your feed year and to see how stocking changes will effect your overall feed availability.

I do a bit of consultancy in regards to pasture management and production and I always use feed budgets as the first method of determining possible production gain areas. If you tie in expected growth patterns with stock requirements it becomes a great tool for looking at the effect of stocking mixes on feed usage and \$ returns per DSE.

In one case we increased the projected income of a client by \$110K per year by changing the stocking mix, value adding some younger stock and changing a couple of management practices. This was done in such a way that changed average dse very little. (See tables 3b-5 to 3b-8) We were able to move peak dse requirements to coincide with peak pasture growth periods. This in turn would provide flow on effects to pasture utilisation and stock performance which would increase the bottom line further.

All we were doing in this exercise was honing the management practices. There was very little monetary expense involved. My consultancy costs would have been the greatest expense involved.

A lot of what we need to do is a matter of education and conducting our businesses more efficiently. It's as simple as that. It's a matter of asking ourselves the hard questions and doing something about it.

What About Feed Gaps?

Coping with feed gaps is all about understanding

your system and recognising its limitations. Winter, late summer and early autumn are a problem for us.

I have found it particularly helpful to have paddocks available, such as the ones described in Tables 3b-3 and 3b-4, where you know you can achieve high weight gains. This allows much more accurate planning in terms of stock movements on and off. Even in our winter months the pastures are capable of realising 1kg/day, even though they run less stock during this time. The important thing is that during these low production periods you can still turn stock off. These pastures help the performance gaps that exist in our system as shown in Figure 3b-1.

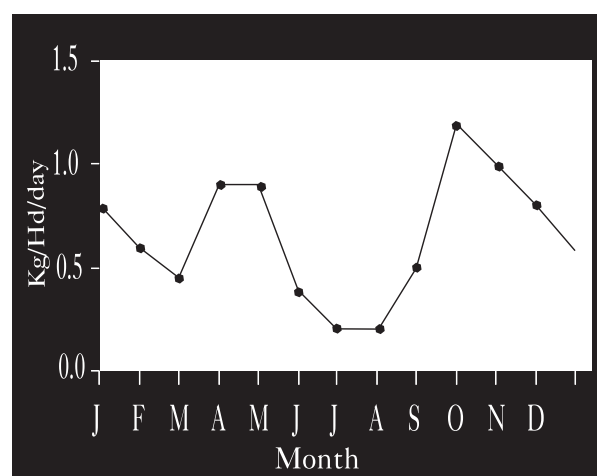


Figure 3b-1. Average weight gains on "Woodlands" by month.

As you can see by the growth rates in Figure 3b-1, in our area if you don't have your stock off by the end of May, you can easily run them for an extra six months to achieve feedlot specifications. If this happens it really knocks the gross margins for six. This is where planning comes into it. About early January I'm on the computer running growth rate models through my cattle program to see what sort of numbers are approaching minimum feedlot specifications at the end of May. This gives me an estimate of the sort of numbers I'm dealing with. Generally it's between 50 – 100 head. So what do I intend to do to ensure that these cattle are in the feedlot in June and not still in my paddock in October?

Well it is very tempting to sow a greater area of high performance pasture to remedy the problem, but our country is such that it is very hard on machinery. The last thing you want to do is be resowing every six to seven years. Nor do I want to destroy well established improved pasture to sow new pasture.

Table 3b-5

Yearly DSE Flow - Current Stocking												
Stock Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
XB Ewes DSE Rating	2.7	1.2	1.2	1.2	1.2	1.2	1.75	3	3.6	3.8	4.	4.2
No.	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380
TOTAL DSE Rating	6,426	2,856	2,856	2,856	2,856	2,856	4,165	7,140	8,568	9,044	9,520	9,996
Lambs DSE Rating	1.7	1.7	1.7	1.7	1.7							
No.	2,594	1,844	1,094	600	494							
TOTAL DSE Rating	4,409.8	3,134.8	1,859.8	1,020	839.8							
Cows DSE Rating	20	20	23	23	17	11	14	16	17	18	19	20
No.	420	420	420	420	420	420	420	420	420	420	420	420
TOTAL DSE Rating	8,400	8,400	9,660	9,660	7,140	4,620	5,880	6,720	7,140	7,560	7,980	8,400
1st Calf Heifers DSE Rating	8	9	15	15	15	18	18	18	20	9	9	9
No.	75	75	75	75	75	75	75	75	75	75	75	75
TOTAL DSE Rating	600	675	1,125	1,125	1,125	1,350	1,350	1,350	1,500	675	675	675
Weaner Heifers DSE Rating	7	8	9	9	9	9	9	9	9	9	10	10
No.	83	83	83	83	83	83	83	83	83	83	83	83
TOTAL DSE Rating	581	664	747	747	747	747	747	747	747	747	830	830
Weaner Steers DSE Rating						6	6	6	7	7	8	8
No.						49	49	49	49	49	49	49
TOTAL DSE Rating						294	294	294	343	343	392	392
GROSS DSE	20,416.8	15,729.8	16,247.8	15,408	12,707.8	9,867	12,436	16,251	18,298	18,369	19,397	20,293
Av DSE/ha/mth	14.84	11.43	11.81	11.20	9.24	7.17	9.04	11.81	13.30	13.35	14.10	14.75
Av DSE/yr	16,285.10					Property Area (Ha) - 1,376						
Av DSE/ha/yr	11.84											
Av DSE/ac/yr	4.79											

Table 3b-6

Yearly DSE Flow - Alternative Stocking												
Stock Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
XB Ewes DSE Rating	2.7	1.2	1.2	1.2	1.2	1.2	1.75	3	3.6	3.8	4	4.2
No.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
TOTAL DSE Rating	5,400	2,400	2,400	2,400	2,400	2,400	3,500	6,000	7,200	7,600	8,000	8,400
Lambs DSE Rating	1.7	1.7	1.7	1.7	1.7							
No.	2,080	1,220	892	580	400							
TOTAL DSE Rating	3,536	2,074	1,516.4	986	680							
Cows DSE Rating	20	20	23	23	17	11	14	16	17	18	19	20
No.	420	420	420	420	420	420	420	420	420	420	420	420
TOTAL DSE Rating	8,400	8,400	9,660	9,660	7,140	4,620	5,880	6,720	7,140	7,560	7,980	8,400
1st Calf Heifers DSE Rating	9	9	9	10	10	12	14	16	17	18	19	20
No.	75	75	75	75	75	75	75	75	75	75	75	75
TOTAL DSE Rating	675	675	675	750	750	900	1,050	1,200	1,275	1,350	1,425	1,500
Weaner Heifers DSE Rating	9					9	9	9	9	9	10	10
No.	147					222	222	222	222	222	222	222
TOTAL DSE Rating	1,323					1,998	1,998	1,998	1,998	1,998	2,220	2,220
Weaner Steers DSE Rating	10	10	10	10		8	8	8	9	9	10	10
No.	100	100	50	50		222	222	222	222	222	222	222
TOTAL DSE Rating	1,000	1,000	500	500		1,776	1,776	1,776	1,998	1,998	2,220	2,220
GROSS DSE	20,334	14,549	14,751.4	14,296	10,970	11,694	14,204	17,694	19,611	20,506	21,845	22,740
Av DSE/ha/mth	14.78	10.57	10.72	10.39	7.97	8.50	10.32	12.86	14.25	14.90	15.88	16.53
av DSE/yr	16,932.87					Property Area (Ha) - 1,376						
Av DSE/ha/yr	12.31											
Av DSE/ac/yr	4.98											

Table 3b-7

Yearly Feed Budget - Current Stocking												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Av DSE/ha	14.84	11.43	11.81	11.2	9.24	7.17	9.04	11.81	13.3	13.35	14.1	14.75
Days	31	28	31	30	31	30	31	31	30	31	30	31
Feed/day/ha required (kg)	19.29	14.86	15.35	14.56	12.01	9.32	11.75	15.35	17.29	17.36	18.33	19.18
Expected Growth/ha/dy (kg)	30	25	16	10	8	8	6	10	20	26	29	30
Change in feed/month	10.71	10.14	0.65	-4.56	-4.01	-1.32	-5.75	-5.35	2.71	8.65	10.67	10.83
Cumulative feed	10.71	20.85	21.50	16.94	12.92	11.60	5.85	0.50	3.21	11.85	22.52	33.35

Table 3b-8

Yearly Feed Budget - Alternative Stocking												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Av DSE/ha	14.78	10.57	10.72	10.39	7.97	8.5	10.32	12.86	14.25	14.9	15.88	16.53
Days	31	28	31	30	31	30	31	31	30	31	30	31
Feed/day/ha required (kg)	19.21	13.74	13.94	13.51	10.36	11.05	13.42	16.72	18.53	19.37	20.64	21.49
Expected Growth/ha/dy (kg)	30	25	16	10	8	8	6	10	20	26	29	30
Change in feed/month	10.79	11.26	2.06	-3.51	-2.36	-3.05	-7.42	-6.72	1.48	6.63	8.36	8.51
Cumulative feed	10.79	22.05	24.11	20.60	18.24	15.19	7.78	1.06	2.53	9.16	17.52	26.03

Instead we have gone down the road of conserving quality high protein excess feed during our growth periods. The contracting business allowed me the luxury of justifying the purchase of the necessary equipment to put away round bale silage. We have been using silage now for four years and it has been well and truly economically justified.

Has the Silage Been Worth It?

The obvious benefit has been to keep turning over cattle in our normal non-production period. Sure the numbers are nowhere near as great as in late spring, and some years are better than others. For instance this last winter it really was hard to get the cattle to do anything but stand around and mope in the wet weather. Even so we still saw a benefit in the spring. What we have noticed in the spring is that cattle fed silage start their compensatory growth phase about a month earlier than cattle not fed silage. So you could say that overall, the main benefit we have received from feeding silage has been to move our production cycle forward. This is worth about \$6,000 - \$8,000 to us annually.

The other spin-off benefit is that we have reduced our average full weight shrinkage from farm weight to processed feedlot weight from 5.8% to 4.7%. We are paid on a processed weight after a minimum of 12 hours on hay racks and water. If the steers are trained to go onto hay at the feedlot straight away it makes an enormous difference to shrinkage and the bottom line. Feeding silage has trained all our steers to eat from the hay racks as soon as they arrive at the feedlot. This means an extra \$2,000 in my pocket annually.

In summary to date, the bottom line shows a net increase in income of approximately \$8,000 - \$10,000 annually as a result of feeding the silage.

Where Are You At?

As I get around, I find it amazing the extent to which many producers pour good money after bad when it comes to their pastures. As I see it the highest priority in any pasture program is to make sure the legume component is present and functioning. Unfortunately, very few producers are prepared to spend the money to maintain their pastures adequately. They will spend it on initial sowing, but they will not spend it on maintenance. Thus very often I see country that is sown down and in four years time it is sown down again. People blame the weather, they blame the fertiliser, they blame the contractor: really they should blame themselves.

The take home message in relation to what I am saying in regards to nutrition, is that feed planning, pasture management and budgeting

is a must with backgrounding. You have to know ahead what you need in the way of feed to maintain a year round turn-off of cattle. The margins are not great enough to stand a four to six month non-production period.

Probably the greatest challenge we face is breaking old habits and looking for better ways of improving our system.

Stock Handling and Management

We have learnt a number of things that can greatly effect cattle performance over the last three years. Perhaps you've known these things all along, but as former sheepmen it has been a steep learning curve for us. These include the following dot points.

• Time Off Feed When Cattle Are Purchased

If cattle are off feed for longer than 36 hours prior to arriving on property, it can take up to 30 days or longer to get those steers moving. When we started with Rangers Valley they were buying a lot of cattle out of the saleyards and it was disastrous, especially if the cattle were trucked long distances. Sometimes the cattle had been off feed for 3 days before arriving on property. In this time the rumen bacteria had died, and understandably the cattle performed poorly for up to 70 days. Their policy now is to buy off farm, and I would prefer if the cattle were purchased on a full weight less 5% basis to avoid any curfewing at all. Nothing wrecks cattle performance and backgrounding gross margins more than a big curfew.

• Weaning on Vendor's Property Prior to Arrival

In the last 12 months this has become standard policy for No 2 cattle bought by Rangers Valley, and as far as we are concerned it has been a good one. Simply put, cattle weaned at home do not stress as much. This means they travel better, they shrink up to 5% less, they are not as stirry, and they begin to put on weight as soon as they arrive on property. Cattle run straight in off their mum's can have a non-performance period of up to 30 days after they arrive. What has surprised a lot of vendors is that weaning has had little or no effect on their selling weights, and in some instances the steers have put on weight prior to trucking. It has to be the way to go!

• Transport Stress

This is also a big problem. Some cattle travel better than others. Weaners are notoriously bad. Sometimes part of the answer lies in trialing new transport companies. It is my opinion that trucks with air bag suspension are a lot easier on the cattle.

- **Feed Quality Changes**

This is important from the time the cattle arrive. We like to get vendor feedback as to what sort of feed the cattle have come off. Again this is a rumen bacteria friendly exercise. If the cattle are subject to large variations in feed quality from that on the vendors property to ours, then you can expect a 30 day non performance period while the rumen bacteria adjust. The same principle applies on property. We would never introduce steers onto lush high performance pasture from our lower grade pastures. They would first be taken through an intermediate pasture to avoid any massive rumen bacteria deaths. There is no sense putting high quality feed down an animal's neck for no return.

- **General Handling**

When we first started backgrounding we used to weigh all our steers every month. This was a mistake because it again created extra stress and related non-performance. Now we weigh steers on arrival into weight groups, and depending on the weight group, some steers might not be touched for 100 days or more. The steers are assessed visually to determine whether they are going ahead and if there is a problem they are reweighed, but otherwise we leave them alone.

I also think it is important to keep a particular mob of steers together as much as possible. This is also stress related. If you pull out a couple of steers from a mob and put them in another, you can stop their performance immediately until they adjust to the new mob. If we are going to draft out steers say into our 350+kg weight group and box them with steers from another mob, we make sure we draft out a reasonable number of at least 15. What happens generally when you do this, is that the steers will run in two separate mobs in the same paddock and you don't effect performance.

The other thing we do is we try to separate any stirry cattle of a mob and run them together in a paddock that is easy to muster. They are only trouble and I'm sure they effect mob performance.

- **Animal Health**

All steers inducted onto the property receive a standard treatment of a broad spectrum worm dose, flukicide and 5 in 1. This eliminates any variables that you may inherit. We then administer another broad spectrum drench and 5 in 1 in the spring. Any cattle that are still around in late May then receive another broad spectrum, flukicide and 5 in 1. Generally we like to turn the cattle over in a maximum of 10 months, so most steers are only around long enough to receive one post arrival drench.

In our area fluke can really knock production around in late autumn. As a part of our normal program we monitor for fluke each autumn and make sure pasture management aids in parasite control.

Conclusion

I have no regrets about entering into backgrounding. My property has benefitted in terms of its pasture base and I have benefitted in terms of having more time to pursue other interests. I have found it an incredibly interesting and stimulating enterprise where I have had the privilege to talk with many breeders throughout the country and to be on the cutting edge of what's happening in the Australian Beef Industry. I am fortunate to have built up a strong relationship with Rangers Valley feedlot that has allowed me to be privy to much information that has enabled me to see things from their side as well. That has had a positive effect on my attitude as a backgrounder in terms of the strategic alliance we have with the company.

In finishing let me reiterate what I have already said. Your climatic conditions, your pasture base will be different to mine. Please do not be discouraged. Your system can be just as or more profitable than mine. I hope that in this paper I will have stimulated you to take a critical look at your production system, to make changes and to reap the rewards.

Another paper on this topic: S1. Ed

