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Don't let high feed levels give you a false sense of security heading into winter

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Introduction

Pasture cover levels on North Island farms are generally well above average.

This has resulted as excellent pasture growth over spring/summer has combined with lower stock numbers from previous drought/dry years.

Or put quite simply, pasture supply has exceeded demand.

The resulting average pasture cover on farm is 2,300 – 2,700 kilograms of dry matter per hectare (x-y cm) at the end of March.

But not all pasture covers are the same. This cover could be on a Northern Waikato farm that had a well controlled (<1900 kgDM/ha) pasture cover at Christmas time and has since accumulated cover to these levels. This will be a relatively fresh sward with moderate metabolisable energy levels and low levels of dead matter.

A farm in the Hawkes Bay will be in a completely different scenario with pastures that were high at Christmas and have continued to stay at high levels until now. These pastures will have a high level of dead/stem material and a lower metabolisable energy level.

Using a tool like Farmax, a farmer can understand what the status of their pasture is like and how they will need to manage it over the winter. The optimum target is to hit key pasture cover targets with excellent pasture quality. Farmax estimates that the energy content is 8.5 MJME/kgDM on the Hawkes Bay farm compared to 9.1 MJME/kgDM on the Waikato farm (a 7% difference).

The fact that pastures are better quality in the Waikato situation with lower levels of dead material and stem means that net growth over the autumn will be higher (i.e. less leaf and stem decay will contribute to greater net pasture growth rates)

Given these difference, the challenge in both situations is how to convert this additional feed into additional profit. The simplest option would be to do nothing and accept reasonable results given the impact of heavier ewes at mating while there is the opportunity to push the envelope further.

So what should be on the agenda?

Items that are currently on the agenda are:

- Ensuring quality feed for ewes over tugging
- Timing of weaning for cows
- Timing of nitrogen fertiliser use
- Use of winter supplements (Forage crops, balage, silage, etc)
- Winter grazing options (dairy cows, trading cattle, finishing cattle, winter lambs)
- Lifting spring stock rates to prevent a repeat of this season (trading/finishing cattle, breeding ewes)

The quality of feed being consumed by ewes over tugging (from joining to ram out or day 40) is critical to achieving an excellent mating result. Ewes should 'skim' paddocks (residuals of >1,500 kgDM/ha) and avoid grazing dead material over this period. From 50 days after joining, the ewes can be used for controlling feed provided their condition score is above 3.

This year was a great season for the beef cow. They were able to contribute to the system in controlling feed surplus and produce fantastic calves. One opportunity that may have been capitalised on is to delay weaning to allow the calves to continue to grow well and maximise feed intakes.

Nitrogen use has been in and out of favour over the last few years. Generally it has provided an excellent return when pasture growth levels are lowest over winter. This is particularly true when compared to other crop and supplementary feeding options. This year nitrogen is likely to be pulled or reduced in the plan but timing is also critical. Applying nitrogen to long covers (>1,800 kgDM) will dramatically lower the response rate (kgDM per kgN applied). It is suggested that you trial applications later once covers have dropped or on areas that have recently been grazed.

This season has seen a large return to the conservation of supplements (silage, balage, hay). The plan was that these would be swallowed up by our dairy farming neighbours but this has been slow to eventuate. The cost of the feed in supplements is high with the feed in a balage bale worth 47c/kgDM before the cost of feeding and utilisation based on \$85 a bale containing 180 kgDM. This is a high opportunity cost to recover so selling first is always desirable unless ration balancing.

So this brings us to the final two considerations: 1) what wintering options can we use to get feed back into control, and 2) how do we prevent the same situation next year? The best tool to do this is Farmax using its c/kgDM analysis of each option to refine policy choice and whole farm comparison to define the best option. Farmax contains a strong database of historical prices and current trends so changing a sale point will influence weight, price and schedule increments if slaughtered. The other advantage of Farmax is that animal intakes are automatically derived using ME calculations from AgResearch based on breed, age, liveweight, liveweight gain and pregnancy/lactation.

The following analysis is based on options for the Waikato Farm. The options under consideration are:

- Winter Cow grazing (10 weeks @ \$23/hd/wk to gain 1 condition score)
- Boner Cows (380 kgLW @ \$1/kg with an average gain of 100 kg to slaughter @ \$3.50/kgCW)

- Trading Bulls (400 kgLW @ \$2.30/kg landed with an average spring value of \$2.50 kgLW @460 kgLW)
- Winter Lambs (32 kgLW @ \$3/kg landed with an average slaughter weight of 20 kgCW @ \$7/kgCW)

Using Farmax, we are able to generate the returns for these various stocking policies (these are not all the possible options but a selection that will assist in utilising surplus winter feed). Given these results, the winter lambs are too low relative to the other returns, the trading bulls provide the opportunity to farm them to slaughter, the boner cows have a high degree of risk and the winter cows generate the best returns.

Policy	Gross Margin
Winter Cows	31.1c/kgDM
Boner Cows	27.7c/kgDM
Trading Bulls	27.4c/kgDM
Winter Lambs	23.0c/kgDM

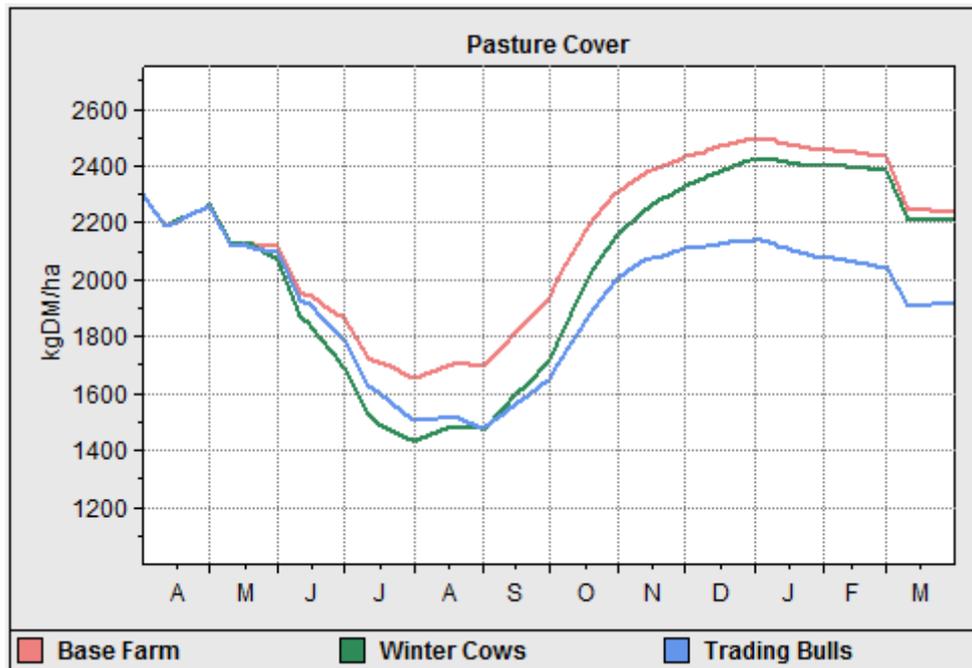
So armed with this real information, we can now apply the results of our c/kgDM analysis to the whole farm to identify the best solution over the following 12 months. The two options to be considered are trading bulls and winter cows.

This property is a hill country farm with 400 ha with 2,300 kgDM/ha at the end of March. The sheep policy consists 2,000 ewes producing 142% lambing to ewes mated with all surplus lambs sold prime. The cattle policy is based on 135 rising one year bulls and 125 rising two year bulls wintered.

Scenario	Base Farm	Winter Cows	Trading Bulls
Sheep Income	260,272	260,272	260,272
Beef Income	123,907	152,657	190,202
Gross Farm Income	384,178	407,467	450,473
Expenditure			
Crop & Feed	66,300	66,300	66,300
Animal Health	12,946	12,946	13,560
Shearing	14,902	14,902	14,902
Interest on Capital	59,850	59,850	68,335
Total Expenditure	153,998	153,998	163,098
Gross Margin	230,180	258,930	287,375
Gross Margin / ha	575	647	718
<i>Difference from base per ha</i>		72	143

The winter cow scenario would need 125 cows to generate \$28,750 over the base. The trading bull option would involve doubling bull numbers (+260 bulls) to create an additional \$57,200 over the base file.

The bull policy would also mean the spring/summer feed is well controlled as demonstrated in the graph below.



Summary

There are plenty of decisions to be made given the high feed level on farm heading into this winter. Having plenty of feed has the potential to be a false sense of security given the additional opportunities it presents. Making good use of Farmax will ensure that you are able to “capture those passing bucks!”