The real cost of not applying fertiliser

Prices are the topic on everyone's conversation list at the moment. It seems that with the current climate of sheep and beef production there are many of you out there considering not applying fertiliser this season. With the increase in freight costs, increased fertiliser prices and the drop in farm returns it seems like financially it is a good option. But is it really that good on the bottom line?

Is your farm in a position to miss fertiliser this year? Fertiliser management is reliant on good numbers and biannual soil testing on the same transects representing the different soil types and the management blocks on the property. The trends in nutrient levels from these tests over time will provide the basis to make informed decisions.

Nutrient levels on your property need to be in the range of Olsen P levels of 20-25, pH 5.8, K 5-8 and Organic-S 15-20 for sheep and beef to achieve optimal conditions for pasture production. If your levels are higher than this on parts or the whole property then you have some nutrient in the tank to be utilised.

So there is room to move, but what is the maintenance level of nutrients required to continue to produce stock at the current level? Roughly, you need about 17 units of P per hectare on sedimentary country for wintering at a stocking rate of 12 su/ha. It will take about 5kg P/ha to move Olsen P by one unit. So if you currently have an Olsen P of 30, you would mine your reserves of 3 Olsen P units by not applying fertiliser this year.

If your property is already below the Olsen P range of 20-25, then you have no room in the tank to achieve the optimum environment for pasture production. You need to be applying the 17 units of P just to maintain your current level of production of 12su/ha. Sedimentary soils have a natural fertility level of about 7-9 Olsen P. By mining nutrients to this level you reduce the ability to achieve pasture production to continue to maintain the stock on the property. Pasture composition, quantity and quality will rapidly reduce.

You need to consider the savings of not fertilising this year versus the long-term cost on the bottom line of the farm business. If the pasture production is reduced, will you finish lambs this season or go store? Will you be able to carry the replacement ewe lambs? Will the ewes reach a reasonable weight for tupping? What are the dollar implications for low weaning weights, poor tupping, less lambs on the ground, less fat lambs out the gate the next season? It will mean that the decision not to put on fertiliser because you can't afford it will become more difficult next year. The instant financial benefits this year may provide greater challenges in the future.

For those of you who have invested in capital dressings of fertiliser. Monitor and test as per usual. It is critical to watch those trends and ensure that the level of nutrients available to maintain your stocking rate is not limiting pasture production.

Also consider that seasonal climate changes will have an influence on pasture production as well, and good fertiliser policy may help your farm manage this influence with less influence on the production of product.

Why the shift in fertiliser prices and will they continue? Pressures on fuel and transportation are a big one. Secondly both China and South America are currently requiring more product and are causing NZ to be price takers with regard to what is left over. America is utilising more fertiliser and agrichemical to produce biofuel crops. This is all leading to increased pricing. What about the future? There are suggestions that fertiliser prices will be rising again in 2008, maybe up as much as 15%. As transport and demand continues to grow, there is only one way it will track (oil prices at the moment is a good example).

If you are still hovering on the idea of not applying fertiliser this year and your nutrient levels are lower than optimum, then delay this decision until March when there may be some more certainty of lamb prices. The risk of this is that fertiliser prices may move in the meantime.

With good knowledge of your land resources combined with an effective monitoring strategy for nutrient status, the decision and implications of “should I or shouldn’t I apply fertiliser” should be straight forward.

With this price trend in mind, maybe it would be worth applying the fertiliser this year, and reassess using the reserves next year?