WESTON ANIMAL NUTRITION

A Branch of George Weston Foods Limited ABN 45 008 429 632

Weston Animal Nutrition

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Giddy and welcome to the winter edition of the Weston Animal Nutrition newsletter. There are a number of key issues at the moment, but the most important is deciding how much fertiliser to use this year. On top of this we have just started a new financial year which presents a great opportunity to look back over the past 12 months and use this information to help plan ahead.

Changing with the seasons – pasture, pellets and profits

General Comments

With some good rainfall around and high milk prices, this winter should be a reasonable opportunity to catch up a little on some of the bills racked up over last spring and summer. The key thing will be to ensure that you choose the right pellet to complement pasture intake and help maintain a balanced diet. If you can do this, and also keep a functional fibre source (straw, rough hay) available, things should tick over relatively nicely.

Protein content

On an unlimited pasture diet, protein shouldn't be too much of an issue so you can go back to a 12-14% protein pellet.

When the spring flush hits, you may need to wind the protein up again as pasture protein declines quite rapidly as fibre increases.

Energy content

Go for a maximum energy, high starch pellet to help balance up the protein in the lush winter pasture.

Fibre content

Aim for a pellet that is low in fibre to avoid pushing grass out of the ration via substitution. That is of course unless you are trying to build up a 'wedge' of pasture in anticipation of a cold period where there won't be much pasture growth. In this case, some substitution might be appropriate to help you extend the rotation. The other scenario is if you are tight on grass, and feeding some hay or silage will help to protect the pasture residual. The leaf appearance rate is likely to be slow enough as it is - the last thing you want to do is to overgraze the pasture. This will slow regrowth down even further.

Summary
The focus is shifting towards maximising pasture intake, rather than driving conversion of conserved feeds. Be sure to change the type of pellet and the feeding rate as the spring flush hits to try and maintain milk production and intake.

TO FERTILISE OR NOT TO FERTILISE

Fertiliser is quickly becoming another of those dirty 'f' words on a dairy farm, (following in the footsteps of 'feed/fodder' and 'fuel') as prices sky-rocket.

Given these higher prices there are three main courses of action that a dairy farmer can take:

1. Cut back on fertiliser use and accept less pasture or home-grown feed (and probably less milk too)
2. Continue with your normal fertiliser program and wear the higher costs
3. Take a strategic approach, get some soil tests and tailor a program that specifically suits your needs so that every dollar spent on fertiliser is giving you the best possible result.

Many farmers seem to be heading down path number 1. Whilst this might seem like the most sensible thing to do at the time, it could turn out to be a costly mistake in the long run (unless of course you can afford to cut back and maintain home-grown feed production sustainably). The intention of this article is to challenge you to consider the big picture, and consult your budget before making any decisions. It aims to help you understand the implications of cutting back on fertiliser and how they might affect the overall performance of the business – hopefully path 3 might seem like the best option in the end.

Key messages

- Consider the big picture and your budget before making fertiliser decisions
- Maintain your focus on maximising home-grown feed production (and utilisation). Grass is not cheap unless you grow and utilise a lot of it.
- Have some soil tests done and get a strategic plan to stretch your fertiliser dollars further. It could be worth paying someone for good agronomic advice.

To ensure that you make the right decision for your farm you need to consider the following question (to begin with):

"As a dairy farmer, why do I own so much land?"

Isn't it so that you can grow as much feed as possible for your milkers and other stock?

The utilisation of home-grown feed is one of the key profit drivers on any dairy farm. This has been proven over and over again in benchmarking studies done throughout Australia. Every business, regardless of size, wants to try and achieve a return on their assets. In most cases a dairy farmers' biggest asset is his/her land, so it is important to ensure that each unit of land

(hectare) returns as much as possible. The only way to get a return on your investment in land is to grow lots of high quality feed for the milkers to convert into milk.

At the very least the farm needs to produce enough each year to cover the maintenance cost of all of the stock. Each cow is eating 2-2.5 tonnes of dry matter every year before they give you a drop of milk back. If you can cover this with home-grown feed, you then have a fighting chance at balancing a ration to cover purchased feed costs and still have enough for the other farm bills. This brings us to the next important question:

"How much does your home-grown feed cost (per tonne of dry matter?"

The high fertiliser prices we are seeing currently help to remind us that home-grown feed isn't free, nor is it cheap (and it never has been for that matter). Apart from fertiliser you also have to include the cost of seed, sprays, labour, and machinery costs (fuel, oil, repairs and maintenance) - most of which are incurred regardless of the amount of feed that you end up growing. On top of this you need to add the cost of owning/renting the land that the feed grows on. Consider this - if your land is worth $6000 per acre ($14800 per hectare), you could earn $1100 per acre per year if it were in a savings account at the bank. If you multiply that out over 200 acres you would be earning $220 000 per year without doing anything at all.

If you want to get serious about working out the cost of home-grown feed you need to add this in. From there it won't take you long to realise that the answer to all of this is…. **Dilution!** That is, growing and utilising more feed to bring the cost per tonne dry matter down and also help to ensure that stock maintenance is covered by home-grown feed.

Having said that, you then need to review the budget and see how much has been allowed for fertiliser. While you are doing that you might consider the following questions:

- How much fertiliser can you afford with the money allocated?
- Will this allow you to follow your normal fertiliser program?
- Is there any room to spend more on fertiliser this year?
- How much fertiliser will your farm need to ensure that minerals aren't limiting production?
- What will grow if you don't fertilise or if you cut back?
- What will this do the cost of home-grown feed?
- Will you still be able to grow enough home-grown feed for stock maintenance?
- What purchased feed options are available if there isn't enough home-grown feed as a result of cutting back on fertiliser?
- Is there enough money in the budget to afford the purchased feeds?
- Will you still get the same milk production from the purchased feeds as you would have from pastures or other home-grown feeds?

It's all a bit of a question overload isn't it. You may be able to get a WAN rep and/or your agronomist to help you with some of them.

There is a fair chance that you won't have enough money in the budget to continue with the normal plan, unless you can borrow it from somewhere else (so path 2 at the start of the article is likely to be out). Therefore, the logical place to start is to get your agronomist to do some soil testing for you. Remember that with the current fertiliser prices 6-10 fertiliser tests isn't going to buy you much fertiliser and the information you receive will be invaluable.

While you can't control fertiliser prices, you can certainly be smart about how you buy and apply fertiliser to ensure that you get the best possible response for every dollar spent. We need to keep the soil balanced to get the best growth response from our plants and this involves a combination of:

- Maintaining adequate mineral levels
- Growing soil bug populations
- Maintaining a good soil structure

A soil test can help to highlight which one of these areas needs the most attention. It may be that there is adequate phosphorous in the soil but it is simply not available to the plant due to the soil structure, or lack of bug activity. Your money could be best spent switching away from a straight N, P, K & S blend (or any combination of these), and the only way you will know this is to have it tested. Remember to buy the best value option, rather than the cheapest and consider what some of the alternative fertilisers may offer.

If you can gain a better understanding of how to grow more home-grown feed through a more targeted fertiliser program, that will be a skill that will serve you well into the future – regardless of fertiliser prices.

<u>Tips on getting the most out of your nitrogen fertiliser</u>

The application of nitrogen fertiliser can still be profitable at the high prices currently being experienced. However it does mean that you will need to ensure that conditions are right for the maximum benefit per kg of nitrogen applied and you will need to calculate what the likely response will be (somewhere between 0-25 kg dry matter grown per kg N applied – DPI website will give you a good guide).

The following points will help you to achieve the best possible return from nitrogen fertiliser:

- Apply at 30-50 kg N/ha (60-100 kg urea per hectare).
- Only put nitrogen onto highly fertile paddocks where moisture isn't limiting or in excess (don't want waterlogging) and that are weed-free
- Allow a minimum of 3 weeks (21 days) after fertiliser application before grazing.
- Nitrogen needs to be applied to actively growing leaves (down to a temperature of 7 degrees). This basically means it needs to go on straight after grazing. This is the time when the plant has the greatest demand for nitrogen. There is no point leaving if for 2-3 weeks and

then putting nitrogen onto leaves that are maturing. You will not get the desired response.

- Make sure that there is 5 cm of residual after grazing (which is recommended in best practice grazing management anyway) if you are going to put nitrogen fertiliser on. This will help keep the nitrogen on the paddock if you get a heap of rain (and or wind for that matter).
- Graze at the 2.5-3 leaf stage at least until Spring, when you can probably drop back to 2-2.5 leaves to maintain pasture quality. Grazing at 2.5 + leaves gives the plant sufficient time to re-build stored energy reserves before it is grazed again. If you graze too early, you won't get the full benefit of a nitrogen application and you run the risk of exhausting the plants energy reserves – which could result in the death of the plant. In addition less than 2 leaves are providing an unbalanced feed to the milkers and you could end up with problems with soluble protein (any ammonia smell in the dairy or urine scalding in the paddock?)
- Back-fence paddocks that are being grazed for more than 2-3 consecutive days.

PROFIT THROUGH PLANNING

Having had the fertiliser discussion there is still a great opportunity to make some serious money. The difference between making a little or a lot is all in the planning (as was the case with fertiliser). So, here are some steps to take to ensure that you make the most of your opportunities this season.

<u>The Financials</u>

- **Benchmark your farm** (Where have you come from?)
    - Have a serious look at what you achieved with your farm for the financial year 07/08 using Weston's Yearly Bench marker (or any other benchmarking program that the milk factory of DPI might offer)
    - Compare these numbers to last year and understand what the results mean

- **Set some goals** (Where do you want to go?)
    - Use the information from the benchmarking session to develop the goals for the coming year.
    - Ensure your goals make the most of the strengths and opportunities (high milk prices) and minimise the impact of the threats and weaknesses (i.e. high input prices and dry weather)
    - Set a profit target (and that does not mean "As much as possible!")
    - Think about the following key performance indicators and how they will impact on your profit target - production per hectare, production per cow, stocking rate, utilisation of home-grown feeds and consumption of purchased feeds

- Production per cow
    - Ensure cow maintenance is diluted
    - Maximise production per hectare
    - Reality check target milk production against what each cow produced last year

- Home grown feed production and utilisation
    - Don't lose focus on home-grown feed – always be striving to grow and utilise as much as possible.
    - Aim for 10 t UDM/ha dry land and 14-16 t UDM/ha irrigated
    - Don't skimp on seed, chemical, fuel or fertilisers when prices are high but spend your dollars wisely

- Stocking rate
    - Stock the farm to ensure maximum utilisation of home-grown feed – ideally you want each cow to eat between 3-3.5 t DM pasture each year
    - Stocking rate also drives production per hectare
    - More cows is not always better – it depends on the amount of home-grown feed being consumed already, and the dilution of cow maintenance

- Supplement use
    - Supplements are your insurance for when home-grown feed runs out
    - They also help ensure cow production targets are met
    - A cow CANNOT produce enough milk on grass alone to dilute her maintenance cost enough

- **Build a budget** (How will you get there?)
    - Take your goals and create a budget that realistically enables you to achieve them
    - Be flexible with the budget throughout the year but realise and understand the implications on profitability – compare target to actuals each month

From this point on you need to feed the cows to achieve the targets. For assistance with nutritional advice contact your local WAN rep.