

Animal Health Update

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Introduction

Welcome to the first edition of Delta Animal Health notes for 2010. These notes are focused on some of the current issues affecting sheep flocks and cattle herds as we move from autumn into winter.

Across the Delta group there is a wide range of seasonal conditions influencing livestock operations at present.

At one extreme in the north east there has been ample green feed on offer since December, stock are in very good condition and most producers have been utilising grazing cereals for some weeks now. By contrast, in many areas to the south west green feed is only just becoming available and producers are still hand feeding. As well, available grazing area is tightening up as the cropping program moves on and grazing crops are not yet ready.

Managing stock through this period as we move into winter and feed sources change brings with it a range of issues that are worth reviewing, as well as, a few new issues that have not been relevant in past seasons.

For sheep meat producers in particular, the significantly higher sale value of stock highlights the importance of ensuring that all aspects of animal health management are attended to. There are also several opportunities to further enhance production levels which are discussed in this newsletter.

Managing the Changing Feed Profile

For those producers who are moving from supplementary feeding on a limited pasture base to putting stock onto fresh green feed, either as grazing crops or pastures, care needs to be taken. This feed can be very high in moisture with dry matter levels being below 20%, a staged introduction to the new feed source and gradual removal of supplementary feed is the best way to manage this issue.

It is also important to remember this point as we move into winter proper and stock are being moved from one feed source (such as canola, to another such as wheat). Attention to this transition period will ensure that stock do not suffer any set back in the rate of weight gain or even weight loss.

Disease Prevention

Every year there are incidences of stock losses due to a range of issues such as:

- Grass Tetany
- Hypocalcaemia
- Nitrate Poisoning
- Pulpy Kidney
- Pregnancy Toxaemia

It is well recognised that a common factor in many of these instances is that animals in poorer condition or lacking good nutrition are more susceptible to these conditions. Whilst stock this season are generally in very good condition it does not mean that the risk of loss is eliminated, in fact, females that are over fat are going to be more prone to some conditions and birthing difficulties.

Simple cost effective practises such as making use of the supplement 'Nutri Lifta' before the onset of Grass Tetany in cattle or Hypocalcaemia in sheep is an easy inexpensive way of preventing losses which seem to appear every year in some part of southern NSW. Nutri Lifta can raise blood levels of critical nutrients quickly and efficiently, in particular magnesium. It is an ad-lib supplement and has an excellent reputation from many frequent users across the Delta group.

This product is commonly used by producers with stock on grazing crops to enhance weight gains as an alternative to the standard Salt/Lime/Causmag mix. Nutri Lifta also contains key minerals, as well as, being more convenient and efficient to use.

Nitrate Poisoning and Pulpy Kidney are other conditions to be aware of during autumn and winter. While pulpy kidney can generally be prevented in sheep with a vaccination program (including an annual booster), sheep and more often cattle can require additional "booster" vaccinations before high risk periods.

Nitrate poisoning is best prevented by avoiding feed sources such as recently

fertilised crops, and fertile sheep camps with recently sprayed thistles, which may be high in nitrates. Alternatively, have another ration available to counter balance the nitrates. When grazing feed is high in nitrate make sure the ration is balanced nutritionally for vitamins A & E, as well as, macro minerals and trace elements.

Due to the more favourable start to our season worm hatchings are increasing to challenging levels across almost every district. A drench will almost certainly be required during the May – June period. With some livestock categories being at record values it is important not to compromise the production of these animals when a relatively inexpensive drench option can optimise your returns. Under these conditions there can be a place for both long and short acting compounds. Your Delta adviser can help identify the best drench option available for your flock or herd.

The targeted use of mineral blocks can also have benefits if made available to livestock *before* problems arise. Speak to your Delta adviser about the types needed to prevent an anticipated problem.

Nutritional Requirements of Ewes

With all classes of sheep bringing such good prices at sales the breeding ewe has become one of our most important production units. The Ewes nutrition therefore, has also increased in importance.

It is well known that as ewes move through pregnancy their nutritional requirements significantly increase. It is worth reviewing the numbers and spending some time feed budgeting throughout this period to ensure the ewes condition is maintained.

A dry ewe can be maintained in good condition on a moderate quality pasture with 800 kg of dry matter available. During the last trimester this moves up to 1,000 kg and when lactating should be between 1,700 and 2,000 kg of available dry matter.

These levels and the pasture quality are even more important for twin lambing ewes as the lambs take up more room in the gut cavity and the ewes energy requirements are harder to meet so pregnancy toxaemia problems can arise.

Pasture management needs to be focused to ensure that these target dry matter levels are available; if they can't be met then supplementary feeding will be required.

The ewe will also benefit from magnesium, calcium and mineral supplementation, particularly just prior to lambing. This can be achieved via practical inexpensive products.

More Lambs from your Current Ewes

The value of sheep meat ensures that all efforts to maximise lambs on the ground and their survival should be explored. While good management and nutrition are paramount to achieving these goals there are further options available to high yielding lamb production systems.

One of these options is the use of the injectable product *Ovastim*[®]. This product works by increasing the % of twin conceptions, with the aim of getting more lambs from the ewe base. To get maximum benefit from this product decisions need to be made and strategies implemented well before joining. The treatment program starts several weeks before the rams go out.

Ewes should be fat scored prior to the commencement of the program as ewes in poor condition due to inadequate nutrition or disease may not respond.

The use of *Ovastim*[®] in commercial flocks have shown an average increase of lambs born of 20%, primarily through an increase in the number of twin births. *Ovastim*[®] gives best results in healthy flocks that generally have a marking rate of between 70-150%. Management also needs to recognise the extra nutrition requirements and needs of a

ewe with twins. At a cost of less than \$1.50 per shot you need very few extra lambs to justify the use of *Ovastim*[®].

If you feel you have a flock structure and time of lambing suited to the use of *Ovastim*[®] get in touch with your Delta Adviser.

Vitamin B 12

Adequate Vitamin B12 nutrition is an important factor in ensuring the survival and subsequent growth rate of lambs and calves. Vitamin B12 is essential for the health and growth of sheep, in particular young lambs and pregnant ewes. Cobalt which is present in pasture and soil is ingested and transformed into B12 in the rumen by rumen bacteria. Vitamin B12 then enters the blood stream and becomes part of a chain of chemical reactions designed to produce glucose which is essential for cell growth, cell maturation, wool production and overall energy production in the sheep.

Cobalt deficiency can occur seasonally, during times of rapid pasture growth resulting in a dilution of cobalt present in the pasture available to the stock. This will typically occur late winter through to spring at a critical time for new born and young stock.

Supplementing the ewe or cow one month pre-lambing/calving will mean that the ewe or cow will have enough B12 for energy production in those vital last weeks of pregnancy and into lactation. It will assist the prenatal lamb or calf with glucose as well as helping reduce the risk of losses due to pregnancy toxaemia. In addition, B12 is stored in the liver of the unborn lamb or calf, so new born lambs and calves are ready to '*hit the ground running*' with adequate levels of B12 available.

Supplementing the lamb/calf at marking and again at weaning will ensure that B12 levels are high enough to provide enough energy for healthy cell production and

enhance growth rates. There are a number of B12 inject-able products available including vaccine combinations which also give protection against clostridial diseases.

Erysipelas Arthritis in Lambs and Sheep

Erysipelas arthritis can commonly be found in newborn lambs, or seen after marking and mulesing. The condition is caused by a bacterium entering the lamb via the umbilicus in newborn lambs or through wounds. The bacterium then travels to and affects the joints, which can become hot, swollen and painful. The lambs then develop lameness.

While some lambs will recover, up to 20% can have permanent joint damage and lameness. These lambs will generally be poor performers and of decreased value.

The use of 'Eryvac' vaccine will control Erysipelas arthritis. With a low cost of approximately 50¢ per dose to protect high value lambs, this vaccine is well worth utilising.

To be effective the ewe must be vaccinated with two initial doses before lambing followed by an annual booster. Passive immunity will pass on to the unborn lamb via the colostrum. The lamb will have immunity to the arthritis for up to 8 weeks which protect them through the danger period.

Majority of NSW flocks could have Cheesy Gland

If you run sheep then there is a high chance that your flock is infected with Cheesy Gland. An abattoir survey conducted by NSW Agriculture (1995) showed that 97% of flocks sampled in NSW were infected. Whilst this may appear to be old data, still today those people who frequent abattoir floors will testify that the majority of condemnation and trimming of carcasses is still due to Cheesy Gland.

Cheesy Gland is a bacterial disease causing abscesses in lymph nodes of the body, the liver, spleen, kidneys and especially the lungs. Although a lot of the infection and resultant production loss often goes unnoticed severe infection may result in ill thrift and emaciation in adult sheep and poor reproductive performance. Secondary infections, wool growth reduction and Ram fertility issues can also be attributed to Cheesy Gland bacterium.

The main method of spread is thought to be from sheep with infected lungs. These sheep cough onto shearing cuts and other wounds. Plunge or shower dipping also increases the chance of infection 5-8 fold.

The use of a 6 in 1 vaccine against Cheesy Gland is very effective. As with most vaccine programs it is critical that two doses of vaccine are given at the correct time apart to establish good immunity in the first instance. *A single dose of 6 in1 at marking will not provide protection against Cheesy Gland.*

Disclaimer: This newsletter is for the benefit of clients. It is not intended to be a complete analysis of all issues raised in the newsletter. As individual circumstances can vary, further professional advice should always be sought before any course of action is undertaken.