SHEEP & BEEF September 2009

Hello to our sheep farmer clients and welcome to a newsletter devoted solely to ovine matters. These articles provide relevant information with upcoming lambing.



New cost effective multivalent vaccine to help curb sudden death

Sudden unexplained death syndrome in cattle and sheep is a frustrating and often puzzling disease. The condition is made more puzzling because the dead stock may have been previously vaccinated for clostridial diseases associated with the condition.

Typically, 5 in 1 vaccination programmes provide adequate cover for the standard clostridial pathogens on New Zealand farms. However, sudden unexplained death can still occur. This has been linked to another clostridial pathogen, *Cl. sordellii*, for which antigens are not contained in the traditional 5in1 vaccines.

Intensive livestock management systems on both sheep and cattle operations increase the possibility of environmental exposure to *Cl. sordellii* as with other clostridial organisms. The *Cl. sordellii* pathogen generates a potent toxin that produces gas-gangrene causing ruptures of the gut, enterotoxaemia, putrid smell and very rapid decomposition of tissues.

Diagnosis of *Cl. sordellii* in sudden death of livestock is often made all the more difficult because of the sporadic nature of the infections, the toxicity, severity and speed of the disease, the similarity of symptoms and tissue damage with other infections as well as the of need to culture the pathogen within mere hours of death in order to avoid confusing it with other clostridial agents causing disease such as blackleg and pulpy kidney.

For farmers who have observed a sudden unexplained death within vaccinated flocks or herds, it can be advisable for them to get a necropsy done as soon as possible to verify *Cl. sordellii* if a 5 in 1 vaccine has already been used. However, even then, diagnosis can often be made more difficult, with invasion and colonisation from other clostridial pathogens.

A cost effective option recently made available in New Zealand is Ultravac SD 6in1.

Ultravac SD 6in1 is a premium clostridial vaccine that has been developed specifically for New Zealand sheep & cattle farmers by Pfizer Animal Health to target the 6 key clostridial pathogens that are believed to be of significance in causing clostridial disease and death in New Zealand livestock.

Ultravac SD 6in1 contains the additional *Cl. sordellii* antigen, to help insure against sudden unexplained death syndrome. It continues to provide the proven protection against the 5 standard clostridial diseases 5in1 has over many years on farms with the added cost effective insurance against sudden unexplained death for sheep and cattle. Come in and talk to us about whether **Ultravac SD 6in1** is right for you.

Ultrvac SD 6inl 500ml \$176.50/pkt = 35cents/dose compared with Ultrvac 5in1 500ml \$76/pkt = 15cents/dose

Scabby Mouth!

A little advance warning will hopefully prevent the not so unusual frantic call to the clinic for vaccine on the day you have chosen to dock your lambs! We can't always guarantee supply in these situations, so plan ahead. We will have the two options:

Scabiguard 250 dose vial with pistol grip applicator.

Scabine 150 dose vial and



LAMB VACCINATION

Hopefully you vaccinate your ewes pre-lambing so that lambs get immunity via colostrum.

If you don't, remember that there is a LAMB VACCINE available that provides immediate but short-lived protection against tetanus (2-3 weeks) and pulpy kidney (4-6 weeks). This can be given at docking/tailing time. The same would apply for orphaned lambs that weren't able to get that vital colostrum in the first 24 hours.

Fly Protection

Come & discuss which product best suits your fly prevention requirements at docking Cyrazin Spray-on now available in 20 Litre.

We will be offering delayed payment options for lamb drenches again this season. I will be contacting you regarding this late September. Orders due by 2nd October.

SMARTShot B12 at docking

As we already know, Cobalt in parts of Taranaki is marginal and may even be deficient. The exciting news is that New Zealand's foremost authority on trace elements, Dr Neville Grace from AgResearch Grasslands, has found an answer to a question that a lot of you want to know - "I have tested the Vitamin B12 status of my lambs: What do these numbers mean and can you put a \$ figure to it?"

From the graph and table below, Dr Grace has demonstrated that supplementing with Vitamin B12 can have a tremendous impact on farm profitability.

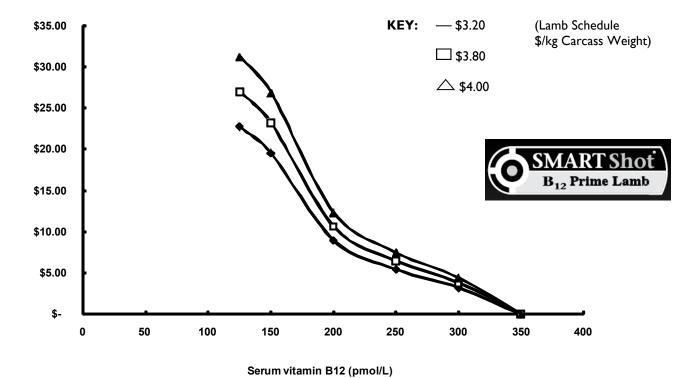
A lamb with a Serum B12 level of 150pmol/L (deficient) that is targeted to grow to 16kg CWT over 120 days will fail to reach this target weight. Based on a schedule of \$4kg/CW, this lamb will fall approximately 6kg short of target equating to a loss of revenue of \$24/head. If you have 2,000 lambs, this will cost you up to \$48,000!!! Note that these results have only been generated up to a \$4.40kg/CW schedule. If we get \$5+kg/CW that the meat processors talk about the results are even more startling!

Supplementation is predominately an injection, whether a short-acting water soluble product (lasts up to 3-4 weeks) or a medium and/or long-acting micro-encapsulated product – SMARTShot Prime Lamb – developed in conjunction with AgResearch by a New Zealand company Stockguard Animal Health.

The dose rate of this product can be adapted to suit your farming operation depending on the fate of your lambs, ie: 0.5mL for 3-4 months, or 1mL for 6-8 months. This will suit those lambs you are targeting to sell straight of the ewe (0.5mL) as well as ewe replacements (1mL) or used to supplement for the length of time as needed.

We all know that the most profitable lamb is one sold straight off the ewe – animal health costs are lower and the yield is higher. These facts combined with the higher lamb schedule pre-xmas make a docking B12 treatment easily justified for those farms with a marginal or deficiency status. Think about this: A \$0.60c injection of SMARTShot Prime Lamb in Cobalt deficient lambs could save you at worst \$7, and at best \$ 30. (article courtesy of Stockguard)

Relationship Between Serum Vitamin B12 and Potential Loss of Revenue in Lambs Benchmark Data: Gain over 120 days to reach LiveWeight of 35kg and a Carcass Weight of 16.1kg at a Serum Vitamin B12 of 350pmol/L



Lamb Schedule (\$/kg carcass weight)

| Serum B12 (pmol/L) | Carcass loss (kg) | \$3.40 Po | \$3.60 tential Loss o | \$3.80 f Revenue as | \$4.00 a result of C | \$4.20 o deficiency | \$4.40 |
|-----------------------|----------------------|--------------|--------------------------|------------------------|-------------------------|---------------------|---------|
| 125 | 7.1 | \$24.10 | \$25.56 | \$26.98 | \$28.40 | \$29.80 | \$31.20 |
| 150 | 6.1 | \$20.74 | \$21.96 | \$23.18 | \$24.40 | \$25.62 | \$26.84 |
| 200 | 2.8 | \$9.52 | \$10.08 | \$10.64 | \$11.20 | \$11.76 | \$12.32 |
| 250 | 1.7 | \$5.78 | \$6.12 | \$6.46 | \$6.80 | \$7.14 | \$7.48 |
| 300 | 1 | \$3.40 | \$3.60 | \$3.80 | \$4.00 | \$4.20 | \$4.40 |