



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

FEBRUARY 2015



Feilding Christmas Parade 2014

Carla Sheridan

Totally Vets were once again proud participants in the Feilding Christmas Parade.

This year we decided to go with a 'Despicable Me' themed float, dressing our children as minions and singing 'Happy' over... and over... and over! Despite the challenge of a typical strong Manawatu wind, our float looked great and our 'minions' were especially well behaved for the duration.

Feilding Promotions put on a fabulous parade and it was awesome to see so many business and community groups taking part. Thousands of people crowded the streets, creating a fantastic atmosphere and occasionally providing a challenge for Frodo our truck driver!

Thanks to all involved in making this such a fun and successful event!

How clean is your water?

Chris Carter

Quality drinking water is essential for all animals and, in most rural areas, we rely on rain water, bores or dams for our household and stock water. Contamination of these sources with bacteria and algae is not uncommon.

Gastric upsets, neurological signs and liver damage are regularly reported as a result of such contaminations. During summer months the toxic effects of blue-green algae blooms are common.

A novel water sanitiser is now being sold in New Zealand under the product name Credence. This is effective against a multitude of problematic micro-organisms, including Salmonella, E. coli, Giardia, Yersinia (which was recently in the news causing disease in humans after eating washed carrots), Leptospirosis, and toxic blue-green algae.

Credence has a long persistency and can be used in all drinking water systems. It is cheaper and more effective than other blocks used for water troughs. Copper sulphate blocks ('blue crystals') when used as a water trough sanitiser can overload animals with copper and unbalance other essential minerals which can lead to problems such as brittle bones. Copper is toxic to some species, including sheep, which must be kept away from treated troughs. Exposing blue-green algae to copper sulphate stresses the algae and causes a burst release of toxin before the algae die, increasing water toxin levels.

Credence avoids these issues, as it is reliant on a different active component (sodium troclosesene) which is not a mineral. The slow release and long persistency of Credence in water (up to three months in tanks, and up to twelve months in dams) means that treatment does not need to be done as often.

The product can be used in various concentrations depending on the purpose. For drinking water, one tablet is needed per 1000 litres. More concentrated forms can be used for hand washing, equipment cleaning, footbaths and general biosecurity.

Check out your water quality today!



Totally Vets current stock health

Cattle

For those that have done an early pregnancy test, it is now time to scan the rechecks and bull mated cows. For those that didn't pregnancy test early, it's now too late, but to get the most out of the one scan, arrange an appointment six weeks after bulls were removed. Be sure to call us and book in early!

Keep monitoring your young stock, especially any recently weaned calves. Parasites, Yersinia, and Coccidia can be a problem in this age stock. It could be a good idea to check that your young stock drenching programme is working by doing a post drench faecal egg count. Drench intervals may need to be shortened if the summer is hot and wet. Lung

Scabine™ batch problem 2014

If you are involved in the sheep industry you may be aware of the problems that have occurred this year with the Scabby Mouth vaccine, Scabine™.

Two batches of this product (132 and 135) have not provided the expected level of protection against Scabby Mouth in lambs this year.

Before batches of Scabine™ are released, they have to be capable of generating immunity (scabs) when applied to lambs at a dilution rate of 200:1. These two batches passed their pre-release tests but the product became less effective after distribution and has only provided partial protection.

By comparison, on farms this year that have experienced scabby mouth outbreaks in unvaccinated lambs, up to 90% of lambs have been affected, and the severity of the lesions has been worse.

That said, the level of production loss experienced on our clients' farms this year has been very costly and we will be following this closely to let you know what happened, and what will be done to prevent a recurrence. Watch this space!



Facial Eczema Summary

Barny Askin

Minimum grass temperatures over 12 degrees, dead matter in the pasture base, add some moisture and you have perfect conditions for spore counts to rise and facial eczema (FE) to appear.

Now is an important time of year for FE and, given this, we thought that, on top of our December newsletter article on FE (please refer to this for additional information), a summary refresher would be a good idea.

- Fallow deer, sheep and alpacas are the most at-risk species, followed by cattle, red deer and goats. Horses are not affected.
- Clinical symptoms include photosensitivity, shade-seeking, swollen ears and face (sheep), appearance of sunburn/crusting on non-pigmented areas and milk drop in dairy cows.

- Monitor spore counts. Spores can vary from paddock to paddock depending on aspect, amount of dead litter etc, and counts can change very quickly. Check out our website www.totallyvets.co.nz for up-to-date regional spore count information and/or bring in grass from your own paddocks for us to check.
- There are multiple approaches to treatment and protection. For the sake of absolute clarity - zinc dosing is preventative, **not a cure**, and needs to be ingested **before** spore counts become too high in order to be effective. Counts >40,000 are considered to be dangerous but counts below this are certainly not risk free, and remember that the damaging effects are cumulative.
- Common methods of prevention include:
 1. Slow release zinc capsules (Face-guard® and Time Capsules®).
 2. Zinc sulphate in the drinking water.
 3. Zinc oxide via feed or drenching.
 4. Grazing management and use of crops.
 5. Pasture fungicide spray.
- Water treatment is not as effective in sheep as it is in cattle and be mindful that animals **must not have an alternative water source!** Zinc capsules are a way of ensuring that your animals have absolute protection and are a lot less labour intensive than regular drenching.

Please don't hesitate to call us at the clinic to discuss your FE treatment/prevention options.

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worm is usually seen later on in the season. This worm causes irritation of the airways, so watch out for coughing, nasal discharge, and ill-thrift.

If you aren't already, it is time to start thinking about facial eczema (FE) prevention. Remember you need to start running the zinc through the water in small doses to get the cattle used to the taste, increase to the target amount over one to two weeks. At the very

least start keeping an eye on spore counts. See Barney's article on page two for more on FE. A Face-Guard™ order form and calculator for cattle and sheep is available on page eight.

Sheep

Mating is on the horizon so remember to order your pre-mating vaccines (Toxovax®, Campyvax®, Androvax® etc) well in advance. In particular, Toxovax®, which must be ordered four weeks prior to delivery to the clinic.

Ram palpations should be all done, but if not already completed now is definitely the time to get on to it!

Historically Barbers pole is a threat in late summer/early autumn. Consider performing faecal egg counts or doing a drench reduction test to make sure that your current drench is effective.

See article on page two for information on Scabine™ batch issues.

Crunching the numbers

Lindsay Rowe

It is human nature to want to think our cows are looking great, but it is my observation that cows are often less well conditioned than the herd manager believes. This means that many herds end up calving in less than optimum body condition and so fail to capitalise on the cow's true potential - the economic cost is significant

Cows that calve with a body condition score (BCS) below 5.0 will produce less milk than they potentially could. This is because there will not be enough stored fat reserves to meet the high demand for energy during the early stages of lactation. They will also take longer to start cycling following calving resulting in a later calving next season. Further loss of production, not to mention the increased risk of being empty at the end of the season, is likely.

WHAT ARE THE BENEFITS OF BCS?

- Monitoring aims to allow for each cow to reach the target BCS of 5.0 by the time she calves
- Cows that calve at the target BCS of 5.0 perform better than cows calving at a BCS of 4.5 (or less):



- They will produce an extra 5 to 6kg milk solids over the season
Value = \$35.00
- They will get pregnant earlier - a 3% increase in the six week in calf rate
Value = \$14.00
- They will be 1.2% less likely to be empty
Value = \$12.00
- The gain for every cow that calves at BCS 5.0 compared to 4.5
Total = \$51.00

(based on \$6.00 per kg milk solids and \$1000 replacement cost)

HOW LONG WILL IT TAKE FOR A COW TO REGAIN HER TARGET BCS?

- Depends on her age - young cows are still growing
- Depends on how much weight she needs to recover
- Depends on feed intake - Table 1 shows target BSC and assumes target intakes of pasture **plus** supplement.
- Dry off date can be calculated back from her expected calving date so as to allocate enough days to be dry

TABLE 1

	Body Condition Score	Days required to be dry before calving	
		Rising 3yr old	Mature Cow
	3.0	140	120
	3.5	120	100
	4.0	100	80
	4.5	80	60
	5.0	60	42

To achieve target BCS by calving you should assess each cow's BCS through the late summer and autumn period so that light cows can be dried off and given enough time to regain weight before calving. You need to plan for cows to reach target condition scores at least **three to four weeks before they are due to calve** - they will gain very little extra weight in those last few weeks.

Totally Vets veterinarians are able to do BCS assessment for you and, where appropriate, it can be done at the same time as pregnancy testing, so call the clinic today to book your herd in!



the vaccine will not eliminate leptospirosis from the animal and they can continue to pass leptospirosis in their urine for up to two years. This means that calves vaccinated at six to eight months old may spread leptospirosis in the milking shed for six months after they enter the milking herd.

Our recommended vaccination protocol is:

Leptospirosis

Juan Klue

Leptospirosis, or “lepto”, is a bacterial disease that can affect almost all mammals, and is one of the most common zoonotic (can be transmitted from animals to humans) diseases.

LEPTO AND PRODUCTION ANIMALS

While many animals are infected without any symptoms, the disease can have an impact on production in cattle, deer and sheep. It can cause a range of symptoms from anaemia, jaundice, redwater, abortion, through to sudden death.

LEPTO AND HUMANS

Humans usually contract leptospirosis via contact with infected urine. The bacteria invade either through the body’s mucous membranes within the mouth and eyes, or through cuts and abrasions. Infection can result in a minor flu-like sickness through to serious illness requiring intensive care at hospital, and even death. Tiredness, depression, joint pain, and

potentially long lasting kidney and/or liver damage are common.

Those contracting leptospirosis may be off work for an extended period(s) so there is also an economic cost and placing of strain on the family/on the farm. Outbreaks in stock can also cause an economic strain on the farm and can be a source of great emotional stress on the farmer.

Traditionally the disease has mainly been occupationally acquired, with strong links to the meat processing, farming and forestry industries. It is a recognised occupational hazard by Occupational Safety and Health, and farm owners are responsible for identifying and taking steps to protect staff from such hazards. Employer expectations are clearly outlined in the Health and Safety in Employment Act 1992, and a robust vaccination program is part of these obligations on dairy farms.

VACCINATION

Vaccination is an important component in the control and prevention of leptospirosis in production animals and humans. For vaccination to be effective, it must be given **before** exposure and infection take place. If vaccination happens after exposure to leptospirosis,

DAIRY CALVES

- **First** primary sensitising injection with Ultravac 7-in-1™ or Leptosheid™ at four to six weeks.
- **Second** booster injection with either product four to six weeks later.
- For spring born calves this requires following up with a **third** injection anytime during the following March to May, which also aligns them with the rest of the herd.
- Thereafter an **annual booster** at the same time each year. This injection should be within 13 months of the previous booster to be most effective.

ADULT CATTLE (DAIRY AND BEEF) AND DEER

- **First** primary sensitising injection can be given at any time.
- **Second** booster injection four to six weeks later.
- An **annual booster** thereafter within 13 months of the previous booster to be most effective.

If you would like advice on preventing leptospirosis in your stock, your staff and your family then give the team at Totally Vets a call today!



The Totally Vets team ready for rafting

Gossip

It was great to see, and socialise with, so many of our clients at the individual branch Christmas BBQ’s. Attendance at the Awapuni, Feilding and Taumarunui events was higher than ever. Thank you to all who came and helped to create such a fun atmosphere!

Sustainable summer lamb drenching

Ginny Dodunski

The basic advice for routine lamb drenching is to use a combination of as many highly effective actives as possible.

By actives we mean the chemical group, for example white (benzimidazole), clear (levamisole) or 'Mectin' groups.

The reason multi-drug combinations are preferred is that there is an exponentially lower chance of a worm having the genes for resistance to three drugs as opposed to one. Thus the chances of a resistant worm being left behind after a drench are much smaller, and the chances of that worm breeding with another and producing offspring, are tiny. This power of combination products to delay the onset of resistance has been demonstrated in both real-life and modelling studies in sheep.

This approach works best when:

1. There is a low level of pre-existing resistance to the individual active chemicals.
2. It is employed with other strategies such as better feeding and use of refugia (leaving some worms unexposed to drench), to prolong the useful life of the products.

Our own staff Christmas party was also a fantastic success with some 30 or more people taking to white-water rafting at Mangaweka and almost 100 enjoying a superb meal and evening at Awastone. Yet again some highly entertaining tales were told as the annual "wally awards" were presented!

Many of our staff had a well earned break over the festive season, taking leave to enjoy some summer sun, and time with family and friends. We now look forward to a busy and exciting year ahead in 2015 as Totally Vets merges with Tararua Veterinary Services

If you have done a faecal egg count reduction test (FECRT) you will have some information on the efficacy of the individual drench actives. On many farms there is a significant level of resistance to one or more of the actives and this can impact on how we recommend combinations be used. For farms with low levels of resistance it can be logical to switch between different types of double combination within or between seasons. However there are no 'recipes' so talk to your vet to arrange your FECRT and get specific advice for your particular situation!

WHEN TO DRENCH?

Lambs weaned onto perennial 'sheep' pastures should be drenched monthly until they begin to develop their own immunity to worms (generally at eight to twelve months of age depending on the situation). Well-fed lambs develop immunity faster, and research has shown that a 'trickle' infection of a low level of larvae generates an earlier and more solid immunity than an overwhelming challenge.

Lambs on low worm challenge feed have the potential to grow twice as fast as those on ordinary sheep pasture, plus will need less drenching. Those grazing crop, new grass and cattle pasture can be drenched at intervals longer than one month, but they must be monitored carefully as unexpected worm challenges can occur on these types of forage, especially where they are a minor part of the farm system.

WHAT ABOUT BARBERS POLE WORM?

This nasty blood-sucking worm can cause deaths and large production losses in lambs

in years where there are late summer/autumn outbreaks. These typically occur when there has been a small amount of rain after a hot dry spell, but heavy dews can bring it on too.

Barbers Pole worm control is generally overdone on New Zealand farms. Outbreaks are not easily forgotten and people tend to base their control strategies on the earliest date this ever happened. Thus the long-acting products used to manage this worm tend to be overused.

A recently completed Ministry of Primary Industries Sustainable Farming Fund project, the 'Best Practice Parasite Management Project' highlighted this issue. Worm species balance on a number of farms across the North Island was monitored, via larval cultures, for three years.

Barbers Pole worm was only identified on a small number of occasions from a small number of farms, and on some farms that believed they had a Barbers Pole issue it was never found! This would suggest that there is better scope for actively monitoring the situation and responding where appropriate.

For those who use Moxidectin (products such as Exodus, Cydectin®) for Barbers Pole worm control in lambs, don't stretch the drench intervals out beyond a month. Doing this tends to let a population of *Trichostrongylus* build up, and these can cause big losses once the rains come later in the autumn.

Look out in next months newsletter for "Knockout drenching... what? when? and why?"

Limited, bringing practices in both Pahiatua and Dannevirke under the Totally Vets umbrella.

Petrena & Greg Clifton of Kimbolton won the BBQ in the Eukanuba Draw. Patrena and her daughters are pictured with the awesome prize.

Thanks to all the children who entered our Christmas colouring competition. We had so many entries to choose from that our job was made very hard! Prize winners were **Ella Simpson, Ben Petterson** and **April Isles**.



Patrena Clifton & her daughters with their Eukanuba prize

Ewe hogget mating

Trevor Cook

Lambing ewe hoggets successfully is a delicate process for which there are many obstacles. Following some basic rules will minimise the impact of those obstacles.

Liveweight at mating is the absolute key. Setting a minimum mating weight is a good start, as long as it is heavy enough. Well publicised gains from lifting that minimum weight confirm its importance. It needs to be 40kg. Remember that this is a minimum, not an average! To achieve this outcome requires a liveweight gain schedule to be set up with targets to check progress along the way. For a late April/early May mating date there has to be an intervention no later than the end of February to have time to lift lighter ones to the target. For lambs to grow at over 100 grams/day in the summer they need access to quality forage. Our hill country pastures are seldom of the required quality at that stage. The limited good feed that traditionally goes into finishing lambs would perhaps be a better investment, and make more income, if used for getting lighter ewe lambs heavier.



A very common area of failure is in **vaccine effectiveness**. There are two diseases that are very common in young breeding ewes and we have vaccines that are very effective against these. The timing of administration and the way that the vaccines are treated can have a big impact on their effectiveness. Campylobacter vaccines need to be given before mating to get the most value from them. The gap between the first vaccination and the booster needs to be between four and eight weeks, NOT two or ten as often seen.

Toxovax™ on the other hand is a one-off shot but must be given early. So while the message is to give it at least one month before mating, giving early in the autumn is just as important. For this vaccine to be fully effective it has to be given into the muscle, not be mixed for longer than two hours, not be exposed to

direct sunlight and be administered through needles that have not come into contact with disinfectant. Furthermore the ewe lambs must be healthy to respond well to this live vaccine. It is little wonder that we see apparent break downs of this vaccine, which are failing because some aspect of how the vaccine has been used is wrong. The very common one is that the vaccine is not given into the muscle.

Teasing no longer than 17 days before the mating date will help, especially if the ewe hoggets are not quite up to weight. Follow these with lots of rams. A minimum ratio of 1:80, but nearer 1:50 is better, especially if using ram hoggets.

Avoiding the above potential obstacles to hogget mating will go a long way to ensuring successful ewe hogget lambing.

A potential danger of dog-roll

Helen Sheard

Given how many working dogs there are in New Zealand (estimated to be about 200,000!) it's interesting that it has been only in the last five years or so that large scale studies have been undertaken into the health and diseases of these dogs.

Working dogs are expected to be both sprint and endurance athletes, and are quite unlike any other type of dog in the world. And so, we segue to the subject of the article. The Vetlife group of veterinary practices in Central Otago are in the throes of carrying out a survey of working dog health and disease on a large scale, collecting a wealth of important data. The survey is only in the early stages, but so far some preliminary concerns have come to light.

Several farmers have reported losing dogs to asphyxiation, after they choked on chunks of dog-roll. Some farmers were present when it occurred, but were unable to save the dog. A post-mortem was carried out on an 18-month old huntaway who was found dead in her kennel. Chunks of unthawed dog-roll were

found in her stomach, and one chunk was wedged in her oesophagus, cutting off her windpipe. The fact that the dog-roll wasn't thawed properly in all likelihood contributed to the fatal nature of the episode.

The recommendation following this revelation was either to leave slices of dog-roll whole, so they have to be chewed, or to mush it up to a mince-like consistency. Cutting roll into bite sized portions often meant the dogs would swallow them whole. The alternative of course is not to feed dog-roll at all.

We look forward to updates from the Vetlife project ('Teammate') as they get further through their project.

Totally Vets can advise you about good quality food for your working dog.

Milk quality from now to drying of

Craig Dickson

At this stage of the season, rising bulk milk somatic cell counts (BMSCC) and reports of increasing clinical mastitis or poor mastitis cure rates are common.

The time is approaching where decisions on culling and dry-cow treatment will need to be made. These decisions impact milk quality during the rest of this season and the cost of mastitis next season.

A good way to benchmark your herd is to check out the SmartSAMM resources at www.smartsamm.co.nz for comparisons of clinical mastitis rates and the changes in BMSCC over time. The graph (Figure 1) below shows the monthly average BMSCC and can be used to benchmark your herd. There are three ranges displayed; the lowest covers herds within the target range, the middle covers herds that require ongoing monitoring and the highest range herds that require action. If

your herd is sitting in the highest range then it is inevitable that the BMSCC will exceed 400,000 during the latter part of the season.

Triggers for action and to seek advice include:

- BMSCC grades.
- BMSCC alerts or warnings.
- Spikes in BMSCC greater than 50,000 cells/ml.
- Upward trend in BMSCC steeper than your herd target BMSCC curve.

The Totally Vets production animal team at Awapuni have plans in the pipeline for our own local BMSCC benchmarking via Infovot, so watch this space!

SUB-CLINICAL MASTITIS

Wholesale treatment of sub-clinical mastitis during lactation is not economic or effective, so culling, drying-off high individual somatic cell count (ISCC) cows early and targeted treatment of cows with a recent new infection are likely options. Removal from supply of a small number of the highest ISCC makes a significant difference to BMSCC.

CLINICAL MASTITIS

Clinical mastitis is expensive, stressful and disruptive to milking. High numbers of clinical cases may indicate problems with preventing

mastitis around calving or during lactation or, in some cases, due to over diagnosing clinical cases.

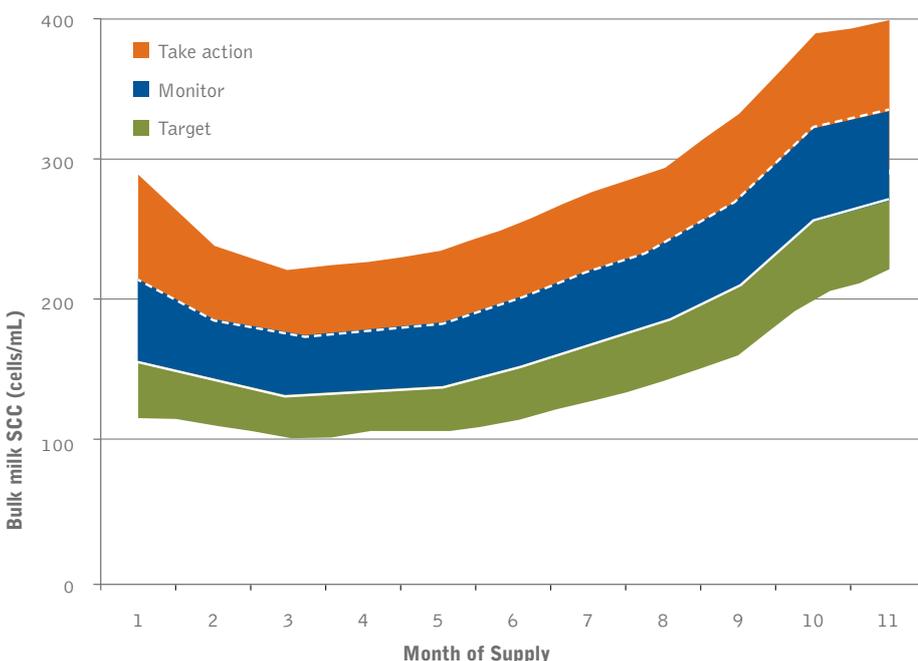
Triggers for action and to seek advice include:

- More than **15** cases/100 cows treated annually.
- More than **8** cases/100 cows calved for monthly clinical case rate at calving.
- More than **16** cases/100 first calvers calved for first calver clinical case rate.
- More than **1** case/100 cows in milk for monthly clinical case rate in lactation (all cows).

Missed clinical cases contribute millions of cells to the BMSCC and a single affected cow is capable of elevating the count by 50,000 overnight. Early detection and treatment is required so:

- Monitor the BMSCC for sharp rises or sudden spikes.
- Check for swollen quarters and those not milking out properly at every milking.
- Watch for clots on the milk filter.
- When BMSCC spikes or clots on the filter are detected, strip check every quarter prior to cupping.
- Keep a record of 'suspect' cows for future reference. These being cows having had mastitis in the last two months; having previously had an ISCC above 500,000; not milking out properly; with teat damage and/or lesions. If a spike occurs or clots are detected on the filter these cows can be checked first.
- During periods when clinical mastitis rates are high, daily foremilk stripping should be practiced on all the cows. When the 'crisis' has passed ongoing monitoring can be achieved by stripping one quarter a day on all the cows on a four day rotation, or every quarter at least once a week. The cows will accept this more readily than less regular stripping.

FIGURE 1. The monthly bulk milk SCC curves can be used to create target, monitor and 'take action' zones to help reach a season target, of 150,000 cells/mL



If the rate of increase in your BMSCC is higher than the target, your herd is already in the 'take action' category, or the number of clinical cases is high, further advice on mastitis control is required. Totally Vets can provide on-farm milking assessments and data analysis to identify the key areas of risk in your herd. So don't hesitate to give us a call!

Face-Guard™

Convenient dosing options



Place your order with **Totally Vets** for peace of mind this facial eczema season

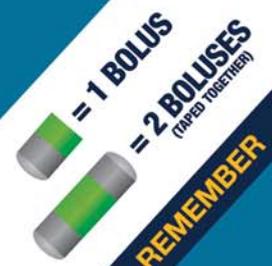


 Face-Guard 90 – 250kg 48 x 60g boluses	Weight Range	No. of Cattle	1st Treatment <i>For 6 weeks protection</i>	No. of Boluses <i>1st Treatment</i>	2nd Treatment – Top-up <i>For additional 4 weeks protection = 10 weeks protection</i>	No. of Boluses <i>2nd Treatment – Top-Up</i>	Total No. of Boluses <i>1st + 2nd Treatment</i>	
	 90 – 130kg			 3 boluses		 2 boluses		
	 131 – 200kg			 4 boluses		 2 boluses		
	 201 – 250kg			 5 boluses		 3 boluses		
			Total No. of 60g Boluses					

 Face-Guard 251 – 660kg 24 x 132g boluses	Weight Range	No. of Cattle	1st Treatment <i>For 6 weeks protection</i>	No. of Boluses <i>1st Treatment</i>	2nd Treatment – Top-up <i>For additional 4 weeks protection = 10 weeks protection</i>	No. of Boluses <i>2nd Treatment – Top-Up</i>	Total No. of Boluses <i>1st + 2nd Treatment</i>	
	 251 – 330kg			 3 boluses		 2 boluses		
	 331 – 440kg			 4 boluses		 2 boluses		
	 441 – 550kg			 5 boluses		 3 boluses		
 551 – 660kg			 6 boluses		 3 boluses			
			Total No. of 132g Boluses					

 Face-Guard FOR SHEEP 25KG AND OVER 80 x 30g boluses	Weight Range	No. of Sheep	1st Treatment <i>For 6 weeks protection</i>	No. of Boluses <i>1st Treatment</i>	2nd Treatment – Top-up <i>For additional 6 weeks protection = 12 weeks protection</i>	No. of Boluses <i>2nd Treatment – Top-Up</i>	Total No. of Boluses <i>1st + 2nd Treatment</i>	
	 25 – 40kg			 2 boluses		 2 boluses		
	 40kg and over			 3 boluses		 2 boluses		
				Total No. of 30g Boluses				

Total Quantity Required	Total No. of 60g Boluses	÷ 48	=	x 60g Bolus boxes
	Total No. of 132g Boluses	÷ 24	=	x 132g Bolus boxes
	Total No. of 30g Boluses	÷ 80	=	x 30g Bolus boxes



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