



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

MARCH 2010



Above Ginny at work checking drench performance.

Drench resistance at the individual farm level?

Finding out the drench resistance status of the worms on your farm is really useful. It can change the recommendations made about drench choices and gives you a picture of how far down the track you are to developing serious problems due to drench failure.

For sensible recommendations about combination drench choices, it pays to get a faecal egg count reduction test (FECRT) done to determine your farm's resistance status and go from there. If you have had FECRTs done, we can revisit them and see if there are newer combination product options available to you.

Reviewing management techniques, other than combination drenches, may also benefit you.

Why are we so keen on combination drenches?

Ginny Dodunski

The recommendations around worm management and especially drenching of farm livestock is an area farmers have had to cope with a lot of change as we all learn more.

Many of us grew up with the theory that the annual rotation of single-action drench families was the best way to slow the development of drench resistance. Why didn't drench rotation work?

Remember that by drenching, you only knock about 10% of the total worm population - the rest are out on the paddock. When a worm population develops genes for resistance to white drench, killing some of the worms in that population with clear drench means that those white drench resistance genes are still sitting there. When you rotate back to a white drench, you pick up where you left off selecting for white drench resistance. Meanwhile, there may now be some clear drench resistance genes out there in the population, so when you rotate back to a clear drench...

Using drugs in combination has been shown to greatly delay this effect. Combinations are better at delaying resistance because the chances of a single worm in the population having genes for resistance to two chemicals is exponentially less than the chance of resistance for just one. When a third action family is added, this chance decreases by an even bigger exponential amount. In addition to this, experimental evidence has shown in many cases that drugs used in combination seem to achieve a greater potency than when used on their own.

Resistance will develop eventually to combinations. The power of combinations to delay resistance is much greater when there is little or no resistance to the individual actives. Based on the data we have, farms that adopted the use of double combinations early generally have lower levels of drench resistance than those who have stuck to using single actives. As alluded to above, using triple combinations would slow the process even more.





Totally Vets current stock health

Animal remedies like leptovaccine, dry-cow antibiotics and some sheep vaccines that are in demand at this time of the year are all registered veterinary medicines under the ACVM Act.

As such they all require a veterinary authorisation. To help us help you, phoning

in at least the day before you need the drugs allows us to have your regular vet authorise these drugs and even have them ready for you to pick up when you visit either practice.

February climatic conditions have been favourable for facial eczema (FE) spore proliferation. The weekly average minimum grass temperature has been above 12°C for some time. Add a little moisture and March,



HA HA Two wolves

One evening, an old Cherokee told his grandson about a battle that goes on inside people.

He said, "My son, the battle between two wolves is inside us all.

One is Evil - he is anger, envy, jealousy, sorrow, regret, greed, arrogance, self-pity, guilt, resentment, inferiority, lies, false pride, superiority and ego.

The other is Good - he is joy, peace, love, hope, serenity, humility, kindness, benevolence, empathy, generosity, truth, compassion and faith."

The grandson thought about this for a minute and then asked his grandfather, "Which wolf wins?"

The old Cherokee simply replied, "The one you feed."



Leptospirosis in people!

Peter Aitken

We are all aware of leptospirosis as a disease that we vaccinate against for the health of our animals, but what about our own health?

The effect of leptospirosis on people varies and ranges from flu-like symptoms through to severe illness including kidney failure, liver failure and/or meningitis. Symptoms are prolonged and recurrent. Although the bacterial infection can be treated, damage done to the kidneys and the liver remains.

I spoke with one local farmer who had recently contracted leptospirosis. After initial symptoms resembling "man flu," he was ill and vomiting and was encouraged to see a doctor. It wasn't until he was admitted to hospital with dehydration and early stages of kidney failure that it was accurately diagnosed and appropriate treatment started. It took approximately three weeks for his health to start to improve but it will take some time yet before he is back to full strength!

Due to the significance of leptospirosis on human health, it is important to remember when working with livestock that all classes of stock can be carriers of leptospirosis, as well as rats and other animals. It is therefore important to maintain good hygiene standards and levels of awareness for you and your staff about the possible risks associated with leptospirosis. This is why we have the Leptosure™ programme to deliver best practice.

After the initial course of two doses, animal vaccinations must be maintained and should be done every 12 months (no more than 13 months) to ensure continued protection. Failure to revaccinate every 12 months may mean having to start the course again. It may also mean that animals are shedding the bacteria and putting you or your workers at risk of becoming infected.

If you would like to discuss the Leptosure™ programme or your vaccination strategies please don't hesitate to contact Totally Vets to speak with one of our production animal vets.

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April and even May spore counts will lift from what have been low counts. Absolute FE spore counts are probably a less important indicator of risk than a rising spore count. Low counts can sensitise animals to higher exposures. If you're not taking preventative measures then maybe you should be.

When supplementing with zinc to prevent FE it is advisable to stop copper treatment. Zinc interferes with the absorption of most forms of copper and animals with FE-damaged livers are more prone to copper toxicity. As

zinc treatments come to an end, have stock tested for copper status using liver samples.

Brucella ovis - whose problem is it anyway? It's my neighbour's problem you say? Well think again. If my neighbour's rams have it, is it possible that my rams could get it or already have it? Or if my rams have it, could my rams spread *B.ovis* to my neighbour's rams? The answer to both those questions is yes! Talk to your neighbour - it's not just their problem - and have your rams checked..



Ewes and rams

Hamish Pike

The majority of ewes are looking better than ever this year leading up to tupping, but the tail-end ewes will need to gain weight pre-mating and over the mating period to increase their ovulation rates.

Avoid shearing ewes within a month prior to mating through to two weeks post-tupping, as the stress involved can have a detrimental effect on ovulation rates and embryonic survival.

It is advisable to run mobs of younger ewes separate to the main flock as they are less active seeking out the ram and their oestrus cycles are shorter than mixed-age (MA) ewes. For this reason, sexually-experienced rams should be used with the younger age groups.

The standard ram-to-ewe ratio is 1:50-1:100. This will depend on the topography of the land and paddock size, age of the ewes and rams, and nutrition. Androvax®-plus (P.A.R. Class I, registered pursuant to the ACVM Act 1997, No A9927) or Ovastim® (P.A.R. Class I, registered pursuant to the ACVM Act 1997, No A8081) users should not use a ram-to-ewe ratio less than 1:100. Ewes should not be able to become separated from the ram by barriers in the topography e.g. creeks, deep gullies, scrub or bush.

Aim to give new teasers at least six weeks rest prior to use to prevent unplanned pregnancies. Ideally, teasers should be introduced 19 days prior to the 'real' rams going out, and at a ratio of about one teaser ram to 300- 500 ewes. A prerequisite for a response is that the ewes must have been isolated from rams, teasers and bucks for at least 21 days prior to teaser introduction. Sudden teaser presence will then induce the ewes to have a 'silent heat' prior to tupping so that they will be into their second, more fertile cycle soon after ram

introduction. An important point to make is that the 'ram (or teaser) effect' will have no bearing on ewes that have already started their normal cyclic activity. There is no need for teasers if ewes have been vaccinated with Androvax®-plus or Ovastim®.

If ram harnesses are to be used, change the colour of the crayon every 14-16 days so that ewes returning to the ram are marked with a different colour. Check the harnesses regularly to ensure they are not chaffing or slipping.

Brucella ovis outbreaks have become more frequent in recent years. This is a disease that causes an increase in dry/dry ewes and may produce a protracted lambing season. This may become more evident on those farms using lower ram:ewe ratios or those using single-sire mating. The disease is considered to be spread venereally, and by sodomy. Please consider getting your rams checked pre-tup for *B.ovis* and other reproductive anomalies. The cost of detecting problems in the rams prior to tupping is far less than the cost involved if the rams don't work!



Tail-end ewes - how to make them perform

Greta Baynes

Preferentially allocating feed and lifting tail-end ewe condition will put more money in your pocket than overfeeding those ewes already in good nick.

WEIGHING VERSUS CONDITION SCORING

The statistics have shown that weighing ewes as a decision-making tool is not viable. A ewe of 60kg liveweight (LW) could have a body condition score (BCS) ranging from 0.5 to 4, although most are BCS 2-3 (BCS scale 1-5). Conversely, a ewe of BCS 2 could range between 50-80kg LW.

Condition scoring is a 'hands-on' tool and not something to be done by eye. A six-month fleece can give a false impression of ewe condition. **Use BCS to monitor ewe condition. Totally Vets will happily help you to learn this simple skill and to set up targets.**

WHY USE CONDITION SCORING?

Trials show a BCS of 2-3 at tupping (ideal BCS depends on breed) optimises conception. Condition should be improving before and during tupping to get the flushing effect. There is a greater benefit from flushing thin ewes than those already blooming.

Our trial showed that improving tupping BCS from 2 or less to 3 or more can increase scanning from 157% to 178%. We also looked at condition gains in thin ewes between tupping and scanning. Those thin ewes that gained condition scanned 3% better than those that lost or maintained BCS. **Consider splitting the mob and lifting those lighter ewes to BCS 2-3 while maintaining those already in ideal condition.**

We compared lamb growth rates from docking to weaning in lambs from thin or fat ewes. Lambs were identified to ewes at docking by spraying udders different colours according to ewe condition at scanning.



This demonstrated that although they grew at similar rates, lambs from thin ewes were at least 1.6kg lighter at both events. Is this significant? The monetary gain from one lamb at 1.6kg LW is not huge but across a line of sheep this could be considerable.

The other less visible benefits are perhaps of more value. Lifting the condition of the light ewes prior to tupping means an increased chance of conception during the first cycle as earlier lambs have more growing time before the first pick and replacement hoggets will be heavier at weaning; an increased conception rate; heavier lambs on the ground; better lactation so better lamb LWG; and better lamb survivability.

Our thanks to the Sustainable Farming Fund and Meat and Wool NZ for funding this trial. A final report will be written at the conclusion of the trial and will be available for perusal.

TABLE 1. COMPARISON OF LW AND LIVEWEIGHT GAIN (LWG) OF LAMBS FROM THIN OR FAT EWES

	AVERAGE DOCKING LW (KG)	AVERAGE WEANING LW (KG)	AVERAGE LWG (G/DAY)
Lambs from fat ewes	18.5	27.2	173
Lambs from thin ewes	16.7	25.6	175

What's the goss?

Big congratulations to Alison, Barny, Jade and Charlie on the safe (and very fast!) birth of Tabitha Fern on the 19th January. Although Tabitha was 11 days overdue, she was born 40 minutes or so after AI arrived at the hospital and AI was home in time for lunch!

Totally Vets have successfully negotiated a contract to supply veterinary services, animal health and production planning and training for an Israeli company to establish a large dairy unit for the Vietnamese government. This contract means one of our dairy vets will be in Vietnam for 18 months. Greg Smith left for the first six month stint on February 19th. Greg will be followed by Craig Tanner, Anita Renes, Peter Aitken and Joao Dib who will each be away for 3 months.

Parking appears to be becoming an issue with some of our vets. "Well, we could see the cars parked at the top of the rise next to the winery entrance, and we just went straight for them. No one said there was a huge sand bunker to negotiate on the way!" Apparently the ice-creams that were being eaten at the time survived this unusual parking style but failed to escape the appetites of their holders.



Above Margaret Leyland and friends surveying their parking skills

Totally Vets people are frequently quoted in the media as well as writing articles of interest on topical issues in the press. Occasionally they get their photographs included. Just to

show that we're not all work and no play and that our talents extend to the arts as well as science, Rebekah, Jackie, Kayla and Charmaine were recently snapped at a rugby match.



Above Rebekah, Jackie, Kayla and Charmaine

Thank you for the overwhelming response to our outdoor-furniture promotion over Christmas. Such was your loyalty to Totally Vets that we were able to add an additional set of furniture to allow three draws. The winners of the outdoor furniture sets are Tony and Lorraine Meads, Anthony and Lynda Gray and Chris and Brendan Print. Congratulations!



Pregnancy scanning sheep

Guy Haynes and Ross Edwards

If you're not already planning to pregnancy test your flock, now is a good time to consider the many benefits of doing so.

The advantages of knowing the pregnancy status of your ewes include being able to quit non-productive dry ewes while prices are still high. The feed eaten by non-productive ewes can then go to productive animals.

Ewes carrying multiple lambs can be preferentially fed to avoid metabolic disorders and to ensure adequate birth weights and early milk production. All of these benefits will maximise lamb survival.

Multiple-bearing ewes can be lambed-down in what are traditionally the best docking paddocks on the farm. This minimises mis-mothering and again enhances lamb survival.

Clients who regularly take advantage of the scanning service offered by Totally Vets and Premier Breeding Services will receive booking forms in the mail. If you have not received a booking form, contact Totally Vets on 06 323 6161 to invest in the benefits of scanning.

Yersiniosis in deer

Barry Askin

It would be fair to say that every weaner deer in New Zealand will be exposed to the *Yersinia* bacteria in their first autumn/winter. This is because the bug is carried by birds, rabbits, rodents, hares, sheep, cattle and pigs and can survive well in soil, water and pasture during the winter months.

How young deer are managed during and after weaning will determine whether or not they succumb to the disease. Anything that stresses the animal such as transport, bad weather, poor nutrition, trace element deficiencies or parasites can cause clinical disease. Animals with no major stressors will usually not present with full-blown clinical disease and show only mild symptoms.

The symptoms of yersiniosis in fawns are a foul-smelling, watery scour that progresses to a bloody diarrhoea and usually death. There is seldom the opportunity to treat a sick animal because of the speed of onset of the disease and in the case of an outbreak, it is not uncommon for 20% of a mob to be affected. In an outbreak, it is usually too late to vaccinate and prophylactic antibiotic therapy

given to the remainder of the mob may be the only approach.

Aim to reduce stress levels as much as possible in young deer and consider reducing stress levels on yourself by vaccinating your weaners with Yersiniavax® [Prescription Animal Remedy (P.A.R) Class I, registered pursuant to the ACVM Act 1997, No. A6151]. The timing of vaccination may be critical in determining its effectiveness. Ideally it should be done in the autumn before the bad weather and young deer have been mobbed together. The single factor that often has the greatest bearing on when to vaccinate is when weaning takes place. Vaccinating before weaning can be challenging, yet leaving deer unprotected until after the rut could lead to problems.

Please give us a call to discuss these issues.

Invest with the body bank

Paul Wiseman

The link between a cow's body condition score (BCS) and her reproductive performance is much stronger than most think. Cows that calve with a BCS less than 5 take longer to start cycling and this reduces both their submission rate (SR) and conception rate (CR). The CR is 7-8% higher at the second heat after calving. Cows that calve too thin are far more likely to be inseminated at their first heat.

BCS targets are manipulated through the quantity and type of feed offered, the frequency of milking (once a day versus twice a day) and the length of lactation. Cost benefits of all of these need careful analysis. If you're unsure of the benefits of changing or modifying your herd's feeding, milking frequency and/or drying-off programme, please seek help from a Totally Vets InCalf advisor.

Regular condition scoring will allow you to monitor nutritional trends and can provide

sufficient warning to take action before poor condition reduces reproductive performance. Monthly checks are recommended. If you wish to limit condition scoring there are critical times. The next critical time is in late lactation (90-120 days before the planned start of calving date). For an August 1st calving date this means April or May.

Earlier condition scoring will help identify those cows and first calvers that will require longer reaching target BCS at calving. Putting condition on cows in late lactation can be difficult with pasture, only because extra pasture eaten tends to increase milk production rather than BCS. You may also need to be increasing average pasture cover for winter feed at this time.

Options to aid in achieving BCS targets include:

- Increasing feed inputs for all cows in late lactation.
- Consider preferentially feeding cows with lower BCS in late lactation.
- Consider early drying-off for cows below BCS thresholds in late lactation

One advantage of feeding dry cows is that all surplus energy goes to increasing body condition rather than producing milk solids. However, milking cows are more efficient than dry cows at converting energy from feed into

body weight gain. On many farms though, insufficient feed in late lactation denies cows the chance to put on weight while continuing to be milked.

Steps to take in late lactation include:

- Prepare a feed budget from late lactation through to two weeks prior to planned start of mating. Include the feed needed to achieve calving BCS targets of 5.0-5.5.
- Identify first calvers and cows with BCS less than 5, less than 4.5 and less than 4 and manage as per the table below.
- Dry off individual cows at the number of days before calving, depending on their age, expected calving date and BCS using the table below.

DRYING-OFF TIME BASED ON BODY CONDITION SCORE

DAYS (MONTHS) FROM NEXT CALVING	CONDITION SCORE	
	Cow	Rising 3-year old
120 (4)	3.0	3.5
90 (3)	3.5	4.0
60 (20)	4.0	5.0
Calving	5.0	5.5

Trace element testing

Anita Renes

The best time is fast approaching for annual trace element testing. Autumn is a good time to test as levels drop to their lowest point in the late winter/early spring. By testing in the autumn we are able to:

Determine if there is a current deficit that could be affecting health and production. If cattle have been receiving zinc for facial eczema prevention, copper depletion may have occurred.

Check that there are enough reserves to buffer the depletion that will occur heading towards spring.

Assess whether the farm's supplementation policy is adequate. Cattle can be receiving too little or too much of a particular trace element. There are numerous trace element products on the market with a very wide range of prices. The most expensive product is not necessarily the best for your farm. Testing can help save your money in the long run.

Liver sampling is the preferred method for testing trace element levels. For a routine check, they give us much more accurate information about trace element reserves and current levels than blood tests do. There are two ways cattle livers can be tested: liver biopsies done by Totally Vets or livers from cull cows tested at the works. Biopsies are generally preferred as we can be more certain

that the animals tested represent the herd and repeat-samples can be taken to monitor trends over time. Works-testing forms are available from Totally Vets if you prefer to use this method.

Pasture-testing can also be valuable in assessing trace element status alongside animal tests. High levels of antagonists in the pasture can reduce absorption of certain trace elements. Knowing the pasture analysis from your property can assist in deciding the best approach to supplementation.

Call Totally Vets to book in your liver biopsies or to obtain a works-testing form.





From Calgary to Kimbolton - part two

Greta Baynes

This is part two of a summary of the Sheep and Beef seminar held in November. Barny discussed some of his recent frustrations owing to animals and biological systems not behaving as expected!

THE BRUCELLA OVIS SAGA CONTINUES

B. ovis is a sexually transmitted bacterium that affects the testicles of rams and causes infertility. Ewes act as transmitters of the disease but do not abort if infected.

In the major outbreak of *B. ovis* discussed at the last seminar, the farmer had his rams palpated annually. Prior to the last mating season, some testicular lesions were discovered. After extensive blood testing the entire flock (100 rams) were culled. Infection had spread from the neighbour who had not palpated his flock for some years. The infected rams were discovered just prior to the mating season. It was not possible to test and remove

all rams prior to mating. This highlights the importance of testing early so infected rams can be eliminated and replacements purchased. Another *B. ovis* case has recently been identified in the Kimbolton-Rangiwahia area. Testing is ongoing.

The take-home messages are to test annually and to communicate with your neighbours. Find out if they are testing. Ensure you make a plan with them - if stray sheep are found on-farm, notify the owner and arrange for sheep to be dropped off and isolated until tested clear. Let them know you have an outbreak and maintain boundary fences.

HOGGET ABORTIONS

Another farm has had a large number of hoggets abort every year since 2005. Tens of thousands of dollars have been spent trying to diagnose the cause and various experts consulted, all to no avail. Without changing any management, the abortions did not occur this year.

The message: animals and biological systems can sometimes be unpredictable both within a set of seemingly unchanging conditions and in their response to treatments. There must always be a reason why things happen but occasionally, despite all the funding and knowledge available, the reason cannot be determined!

The Tail-End Ewe Trial (TEET) has now been running for over six months. Greta summarised some of the findings based on raw data only as the statistics on this data set have not yet been done.

There was no clear correlation between body condition score (BCS) and liveweight (LW) as demonstrated in Figure 1. This reinforces the idea that weighing does not give a good indication of ewe condition

Half the thin ewes were drenched pre-winter. Over 50% of the undrenched ewes lost condition between drenching and scanning whereas less than 10% of the drenched ewes lost condition; they either maintained or gained BCS. However, drenched ewes were not less daggy than the undrenched group.

As seen in Figure 2, there was a significant increase in fecundity with ewes that were fat at tugging.

There is a huge mountain of data to examine and we have currently only brushed the surface. Watch this space for more information. Another six months of the trial lies ahead and we are hoping to gather information to help you farm tail-end ewes more efficiently.

We aim to hold another Sheep and Beef conference in the next six to eight months. If you have any topics you would like discussed, please do mention them to your vet.

FIGURE 1. CORRELATION BETWEEN LW AND BCS IN COMPOSITE EWES

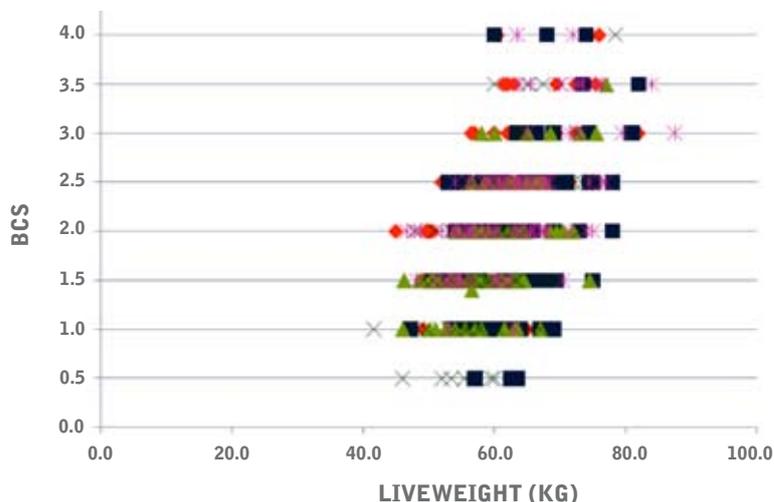


FIGURE 2. SCANNING % IN EWES BASED ON BCS AT TUPPING.





Above Blair Cottrill with a 9.58kg snapper in 2008.

Totally Vets annual fishing competition

Our sage augurs as well as the bloke down the pub inform us the tides and moon will be in alignment in mid April, so the Totally Vets Annual Fishing Competition will be held on Sat 17th April launching from the Castlecliff Boat Club.

The competition begins at first light, with the weigh-in at the boat club at 4.00pm followed by a BBQ and prize-giving.

To be eligible for the competition all boats entered must have a Totally Vets account holder on board.

Entry forms and copies of the rules and regulations are available at both clinics.

Please get your entry forms back to us ASAP as the number of boats may have to be restricted if the competition continues to grow.



Dairy farmer seminar

**Totally Vets is hosting a seminar
"Growing Great Heifers"**

Where Rongotea Tavern

When Thursday 25th March 2010
11.00am - 1.00pm
Followed by lunch

Topics include

The costs of successful heifer-rearing
Measuring successful heifer-rearing
Feeding for success
Controlling animal health issues
Mating
Totally Vets' offer to you

RSVP to Hayley at **06 323 6161** or
Julie at **06 356 5011** by Friday 19th March.



Totally Vets golf tournament

Client interest is such that Totally Vets is eager to provide a day of fun and laughter on a course.

When Tuesday 16th March 2010

Where Feilding Golf Club

Registration 10.30am

Tee Off Shotgun start 11.30am

Format Ambrose with "stacked" teams

Entries Restricted to Totally Vets clients and their employees and suppliers

RSVP to Hayley at **06 323 6161** or
Julie at **06 356 5011** by Friday 12th March