



# VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM SEPTEMBER 09



Above Greg Smith

## Greg Smith - ready to serve

Greg's decision to stay and practise veterinary science in the Manawatu is a boon to the clients whose animals he cares for, to the Totally Vets team and anyone who knows Greg. Greg is one of Totally Vets more senior production animal vets and possesses a wealth of practical knowledge.

"I would like more time set aside for clients to discuss complex issues like lameness and mastitis beyond the discussion that takes place over the sick cow when combined attentions are divided. I still get a real kick from delivering a live calf as well."

Tramping maintains Greg's peace of mind. Any hunting successes are purely a secondary benefit.

## All the way to Norway!

Ginny Dodunski

Back in June, a small group of NZ sheep vets were sponsored a trip to Norway by Intervet/ Schering Plough, to attend the International Sheep Veterinary Congress, and I was lucky enough to be one of them!

I boarded my plane in Palmy for 36 hours travel straight to Stavanger, on the West coast of Norway. Stavanger is one of the main sea ports in Norway and the largest town in Rogaland, which is Norway's big sheep area.

Norwegian farms are heavily subsidised - easy to do when the nation earns a huge annual interest income from its oil fund! The animals are very big, about 85kg dry. The average flock size is about 70 ewes (yes that is the right number of zeroes!), but highly productive, with many ewes rearing triplets in an intensive, indoor lambing system. So while the flocks are highly productive, they have high infrastructure costs.

Once the ewes have lambed, all the flocks go up to hill/mountain pastures for the summer. Supplement is then grown on the home farm. In late summer, they are mustered back down to communal yards (luckily there is no Brucellosis in Norway), drafted into owner's lines and the majority of the lambs go straight off mum to slaughter at about 120 days.

Farming in Norway is as much about preserving the traditional landscape, which is gorgeous; the little patchwork paddocks give way to beautiful green hillside pastures which quickly become mountains similar to what we have in Fjordland. The people are really relaxed and friendly and keen to tell you about their way of life - similar to Kiwis really - we felt right at home and could have stayed far longer.

New Zealand is hosting the next Congress in 2013, and having had the trip of a lifetime to this one, I imagine there will be a role for me in organising it!

Below Ginny (kneeling on right) with NZ delegates in Norway





# Totally Vets current stock health

## Dairy

The different causes of **calv scours** show similar symptoms. Knowing the actual cause of scours helps immensely when it comes to recommending management and treatment.

With **mating** fast approaching there are many things to prepare for. Check "At Risk" cows, measure body condition and measure pre-mating heats to help determine if non-cyclers

will be a problem for you, plan "Why Wait" programmes, determine trigger points for non-cycling cow interventions, and take pre-mating bloods for essential minerals.

## Horses

Are you planning on artificially inseminating your mare? If so, contact one of our equine vets at the Palmerston North branch of Totally Vets soon to discuss the protocols and ensure your space.



## HA HA Wisdom versus youth

A cocky young man at a construction site was bragging that he could outdo anyone in a feat of strength. He made a special case of making fun of one of the older workmen. After several minutes, the older worker had had enough.

"Why don't you put your money where your mouth is?" he said.

"I'll bet a week's wages that I can haul something in a wheelbarrow over to that outbuilding that you won't be able to wheel back."

"You're on old man," the braggart replied. "Let's see what you've got!"

The old man reached out and grabbed the wheelbarrow by the handles. Then, nodding to the young man, he said...

"All right, get in..."

# Selenium - the forgotten mineral

Anita Renes

## WHAT EFFECT DOES SELENIUM DEFICIENCY HAVE ON THE ANIMAL?

Selenium has a very important role in the body, which is to protect against free-radical damage and support optimum immune function. Selenium deficiency will cause ill-thrift and poor growth in calves and lambs. Young lambs, calves and deer can also be affected by white muscle disease which is characterised by severe muscle damage and often death. Some research has also shown selenium deficiency to cause early embryonic loss in ewes and reduced milk production and infertility in cattle.

## WHAT CAUSES SELENIUM DEFICIENCY?

Animal selenium levels are determined by the amount of selenium in their diet (and hence plant and soil levels). There are very few minerals that prevent absorption of selenium as is the case with copper. High sulphate

levels have been shown to reduce selenium absorption to some degree. Legumes tend to be lower in selenium than grasses and more alkaline soils encourage greater selenium uptake. Selenium deficiency is linked to soil type, with soils in the Horowhenua and coastal parts of the Rangitikei and Manawatu often being quite deficient.

## WHEN ARE SELENIUM LEVELS LOWEST?

Selenium levels in animals tend to be lowest during periods of rapid pasture growth. Selenium deficiency could become more of a problem with improved pastures. Animals do not store selenium in the body in large amounts so a regular dietary intake is important.

## WHAT IS THE BEST WAY OF TESTING SELENIUM LEVELS?

Selenium levels can be accurately tested using liver or blood samples. Cattle are often tested in the late autumn. Five to six month-old lambs are usually the best group on which to assess selenium status on sheep farms. Pasture and soil samples can also be very useful, especially if the farm consists of more than one soil/terrain type. The optimum time and type of test will vary between properties.

**Talk to Totally Vets about what is best for your farm.**



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## Sheep

On farms with **Scabby Mouth** and lambs at risk of infection vaccination is recommended. The vaccine is usually applied to lambs at tailing time. It pays to inspect the inoculation site 5-7 days later to check that the vaccine has taken.

Favourable weather conditions helped **early lamb survival**. Use lamb vaccine where ewes have not been vaccinated with a 5-in-1 clostridial vaccine before lambing. Otherwise wait until weaning to vaccinate replacements with 5-in-1.

## Deer

Hind scanning has gone well this season with up to 90% of yearlings in calf. Mixed age hinds have also produced very good results.

Prepare for **velvetting**. Carry out maintenance work on deer sheds and associated facilities for ease of handling and yarding. Deer shed flooring is often recognised as a fault during assessment visits to accredited velveters.

## Beef Cattle

With cows in reasonable condition going into calving, the risk of downer cows is high, especially if you are short of feed. Keep up magnesium supplementation and be alert to milk fever.



# Bloat

Anita Renes

Pasture bloat is a serious and unpredictable condition of grazing cattle.

Spring and autumn tend to be the most dangerous seasons when young, lush pastures are high in protein, water and starch and low in fibre. Fermentation of this feed in the rumen produces excess gas that becomes trapped in the rumen contents. This forms stable foam that cannot be belched out.

Cattle can bloat within 15 minutes of being put onto high risk feeds. Outbreaks of bloat commonly occur, however individual cattle can die of bloat with little sign of bloat in the rest of the herd.

Cattle suffering from bloat will have a distended abdomen - most obvious in the upper left-hand flank. Initially the cow is restless, stops eating and tries frequently to urinate and defaecate. Cattle eventually die from heart or lung failure due to the pressure of the distended abdomen on these organs.

If you notice an animal with early signs of bloat, drench them with bloat oil or 100ml of vegetable oil if bloat oil is not available. Remove the herd from the offending pasture and feed hay or mature grass/silage. Animals in severe distress will need to be stabbed in the upper left-hand flank to relieve the pressure.

There are a number of other conditions that can cause a cow to appear bloated. If the animal does not respond to initial treatment, call a vet.

There is no one bloat control measure that will be 100% effective on its own, however the risk of bloat can be significantly reduced by a combination of management practices and bloat prevention products. An extra bonus is that most of these strategies improve production/profitability in addition to controlling bloat and include:

- **Avoid gorging of high-risk pastures by hungry cows.** Options are to offer hay or silage; avoid high-risk paddocks as the first feed after morning milking; alternatively graze high-risk pastures with poorer quality pastures.

- **Ensure the diet contains adequate fibre.** Higher pre- and post-grazing residuals lower the incidence of bloat as the pasture is more mature. Adding hay or straw to the diet will provide additional fibre with the added benefit of improving rumen function and reducing the risk of sub-clinical acidosis.
- **Rumen modifiers.** These are oral products that alter the rumen flora make-up by increasing the population of efficient energy-producing bacteria and reducing the population of less efficient gas-producing bacteria. Rumensin is an example of a rumen modifier and is available in powder, liquid and capsule form.
- **Bloat deterrents:** Modern bloat deterrents (e.g. Bloatenz) act by breaking down the stable foam in the rumen.

**Please speak to Totally Vets about which bloat management strategies are most practical for your situation.**

# Update on Prescription Animal Remedies (PARs)

It is that time of year when we ensure that all of your PAR authorisations are up-to-date.

These authorisations are a legal requirement allowing us to prescribe certain products to you (mainly antibiotics and some vaccines) and to dispense those authorised products without the need to consult with a vet each time you require them. Without PAR authorisations in place, you are not legally allowed to procure these products.

PAR consults will cost \$35 including GST and need to be done annually. This charge is to help cover the considerable time commitment that goes into the administration behind this service. If PAR authorisations are not in place, then a \$15 prescription fee will be charged every time a PAR is purchased.



## New data on worms in deer - what does it mean for me?

Ginny Dodunski

Hopefully you will remember that last month we learned that

- Young deer are probably just as susceptible as young lambs to appetite suppression and reduced weight gain from daily intakes of worm larvae
- Fawns/weaners are the major sources of pasture contamination, even when supposedly still getting much of their dietary intake from milk
- This effect is likely to be greater where lactating hinds are already grazing heavily contaminated areas
- There is no evidence that red hinds show a rise in egg counts around the birth period the way that ewes can

### SO WHAT DOES THIS MEAN FOR ME?

There is opportunity to improve growth rates of fawns on lactating hinds by making an effort to provide 'cleaner' pasture for fawning.

Depending on the area in deer fencing and the balance of deer versus other stock classes, there may be scope for grazing fawning paddocks with a different stock class for a few months before fawning. Grazing the area only with adult deer rather than weaners could also help.

Weaning fawns onto a different area to where they were grazed with mum would help break the cycle of contamination that builds up over the autumn. Obviously selling fawns at weaning will do this really nicely!

All of these messages apply equally to reducing the challenge from lungworm and possibly Johne's disease as well.

**So now is the perfect time to start thinking about how to apply this information in your own system at fawning this year. Feel free to give your friendly deer vet a call at the Feilding branch of Totally Vets if you would like any further help with managing worms in your deer.**

## What's the goss?

The Feilding branch of Totally Vets are "buzzing". Totally Vets were nominated in two categories of The Feilding Excellence in Business Awards. The practice was nominated in The Best Rural Business Category and Sandy Fitzgerald was nominated as Outstanding Employee. At the Awards presentation on July 29th Totally Vets were awarded Best Rural Business.

Congratulations to Kirk, Tracey and Connor on the safe arrival of Lauren Elizabeth Jane, who was born close to midnight on July 29th. Lauren weighed a very healthy 4.5kg or 9.92 pounds! Kirk says she is very long and an "easy" baby. Maybe we should check with Tracey about the "easy" part?

Congratulations to Peter Aitken and Rosie on their engagement. Proposing at altitude and in the snow may sound very romantic. Obviously Rosie didn't take too long to say yes because Pete has no evidence of frostbite on one knee.

Joao and Nigel have both been on missions to Brazil. Joao's mission was to sort out the citizenship status and Nigel went to visit his son. They assure us they didn't meet although they were both there at the same time. Having family in exotic locations makes a great excuse to travel!

Totally Vets has a request for our farmer clients. Please advise our vets of new buildings and relocated water troughs. Paul managed to back into a water trough that wasn't there 20 years ago and Barney found someone had built a garage behind his ute while he was on the job.



Above Aimee, Sandy, Eliza, Catherine, Craig, Kristen, Christine, Hamish, Rebekah and Lindsay

Congratulations to Pat Cosgrave who won a trip to Auckland with Hills Pet Food to see "Cats" the musical by purchasing her cat food through Totally Vets. Pat had a great time and it's so nice when our clients win national prizes!!



## Magnesium in beef cows

Hamish Pike

Magnesium is required for optimal rumen fermentation. Ruminants deficient in magnesium have lowered cellulose digestion in the rumen resulting in reduced appetite and total nutrient intake.

Magnesium is also essential for key body enzyme systems regulating energy, protein and fat metabolism.

In addition, magnesium is also involved in the uptake and metabolism of calcium, as well as nerve function.

Therefore, deficient magnesium intakes before calving are associated with reduced voluntary intakes resulting in the inability of cows to gain weight despite above-maintenance feeding levels, and an increased incidence of both milk fever (low calcium) and grass staggers (low magnesium).

After calving, magnesium deficiency has been associated with excessive bodyweight loss, often with reduced milk production.

The impact of this disorder on your property will depend on a number of nutritional, environmental and management factors. Underfeeding, early calving on lush spring pasture, abrupt changes in diet, age (older cattle are more predisposed) and a large parasite burden are all factors which will increase the likelihood of animals lapsing into a low magnesium state.

As a general rule, magnesium supplementation should begin in the cows at least three weeks before calving and should continue for at least a month after calving where practical.

### OPTIONS FOR MAGNESIUM SUPPLEMENTATION INCLUDE:

1. **Magnesium capsules** - release elemental magnesium in the rumen for up to 90 days.
2. **Treatment of hay/silage** - apply as a slurry (1 part water to 1 part magnesium oxide) at 50g/cow/day.
3. **Pasture dusting** - magnesium oxide at 70g/cow/day. Apply in the morning when grass is wet with dew. Be aware of its side-effects. It is a depressant in humans, so avoid inhaling the dust. Dust into the wind, and wear a mask.
4. **Peta dispenser delivery in trough** - magnesium chloride or magnesium sulphate at 60g/cow/day.

**If you have any questions, please do not hesitate to contact us at either branch of Totally Vets.**

## More grass, more profit!

Lindsay Rowe

Analysis of the financial and physical data for a range of NZ dairy farms using RedSky (a software programme for measuring farm performance available through Intelact), indicates that the biggest driver of profit on a dairy farm is pasture harvest. Probably not a big surprise!

Given that pasture harvest is linked so strongly to profitability and that profit is so important in the current economic environment, the bigger surprise is that more farms are not taking the opportunity to measure and monitor pasture growth and harvest rates.

The recently developed "three-leaf principle" can be used to estimate how fast the grass is currently growing on your farm and then to set a rotation to match. When carefully applied, this principle will maximise potential growth rates and pasture harvest and improve tiller persistency.

In pasture, ryegrass plants are actually a collection of tillers, each tiller living for a maximum of around one year, regardless of how long the pasture has been established. Each ryegrass tiller produces three green leaves; as the fourth leaf appears, the first dies. In sunlight, leaves produce sugars and these are used as an energy source by the plant. What the plant doesn't use immediately is stored in the base (bottom 4cm) of the tiller.

When a ryegrass plant is grazed, the roots stop growing; new tillers stop emerging and the plant uses its energy reserves to grow its first leaf. This new leaf begins to make energy from the sun as it grows but it is not until the second new leaf has grown that energy stores

are replenished and root growth and tillering are active again.

If the plant is grazed before this critical two-leaf stage, yield will be reduced (as will milk production) and the plant will be less likely to survive successive grazings due to depleted energy reserves. The two-leaf stage thus sets the minimum grazing interval for ryegrass pastures.

If we let the ryegrass plant grow beyond the three-leaf stage, leaves start to die, pasture is wasted and pasture quality deteriorates. Milk production from these pastures will also be reduced. The three-leaf stage thus sets the maximum grazing interval for ryegrass pastures.

**For more information about the "three-leaf principle," please contact Lindsay Rowe at the Feilding branch of Totally Vets. He has been using the principle for several years now and can help you apply the technique to your property.**

# First foal flourishes

Margaret Leyland

The foaling season started surprisingly early at Wellfield Stud this year when one of the mares gave birth about six weeks earlier than expected. The newborn foal weighed just 36kg and was born at 5am on the 14th July. Luckily Wellfield's capable foaling manager, Libby, was on hand to ensure that everything went smoothly. The foal has been named Jessie, after Wellfield owner Bill Gleeson's daughter who shares her birthday.

Foals that are born this early rarely survive, but Jessie did not have the typical appearance of a premature foal. Part of the placenta had been infected for about a week before Jessie was born, and the stress that this caused kick-started the foal into maturing early. Even so, she was quite weak and had to be helped to stand to nurse for the first few hours. Libby had to head to town and pick up a dog cover as the foal covers swamped little Jessie.

Although everything appeared to be progressing normally, we were quite worried about Jessie as early foals are at high risk of developing complications like septicaemia (blood poisoning). She was started on a course of antibiotics as a precaution, the mare's udder and legs were disinfected to reduce the chance of infection getting in while Jessie nursed, and we gave her a plasma transfusion to increase the number of antibodies she had to fight infection. Even with the transfusion, blood tests showed that her levels of antibody were dangerously low after 24 hours so she was given a second transfusion. This helped a lot, but IgG levels were still under the ideal 800mg/dL so she had a third transfusion on day four.

It sometimes seems that we are being overly aggressive with our treatment when the foal appears to be fit and healthy, but in these cases, prevention is definitely better than cure. Once a foal becomes septic, the prognosis is never good and they can become very costly in terms of heartache as well as dollars.

Jessie is progressing well and has been spending some time outside with mum when the weather is fine.



**Above** Small but perfectly formed: Jessie and studhand, Mark, from Wellfield.

Goodwood Stud's stallion, Chinese Dragon, stood his first season last year. Rex and William Fell have been eagerly anticipating his first foal crop. Dragon's very first foal was not too far behind Wellfield's early start, a handsome healthy chestnut colt born on 8th August just a couple of days before his due date.



## The docking drench - a forgotten art?

Ginny Dodunski

Prior to the advent of long-acting pre-lamb drench treatments, drenching ewes at docking was a popular practice.

By docking time, ewes on many farms were/are often at their lowest body condition, and some (not all) ewes become daggy - visual indicators that they might benefit from a drench. This dagginess is in part a sign that the ewe's immunity to parasites is being restored and

she is working to expel the increased worm burden she picked up over lambing.

One of the main perceived benefits of using a long-acting treatment in ewes pre-lamb is that the ewes stay clean through to docking. However, given that best practice now states we should be minimising the use of these long-acting products, there is probably a place for a targeted docking drench in some flocks.

Drenching the whole ewe flock at docking is likely to be unnecessary and could be risky from a drench resistance perspective, but targeting treatment to thin (condition score < 2) and daggy ewes makes sense.

**Totally Vets is hoping to do some trial work shortly on this topic - watch this space!**



# Sex education, it's never too early!

Peter Aitken

The time of year is fast approaching when we need to focus on mating in order to optimise returns for the following season. Yes, it's time to plan for next season already!

One of the best ways to do this is to put down on paper what you plan to do come mating time. This helps take the hassle out of planning, alleviates the frantic rush at the back end of calving and gets things organised.

Below is an example of a mating timeline created by a client, Arno Renes, to remind himself when the important jobs are due. By using a timeline and putting the important dates into his diary, he keeps on top of the tasks that need doing.

The basic objective of a seasonal mating system is to get as many cows in calf as possible, as quickly as possible, and preferably to a genetically superior sire. Getting these strategies right will enable you to capitalise on market conditions prevailing at the time, either by capturing more valuable days in milk next season or as a seller of 'surplus' stock.

While much of the outcome of a herd's mating programme has been pre-determined by events and management decisions over the past 3-6 months, there are still some actions that can be taken now to improve the final result:

- Be very mindful of **cow condition** at calving and over the following weeks, to ensure they don't lose too much condition
- For those that have already planned for investment in the **early treatment of non-cycling cows**...well done on a smart business move
- For those that are on track to achieve a **90+% submission rate** without hormonal intervention...take a bow, that's even better
- For those not submitting the equivalent of 4.5% of the herd on a daily basis, make the decision to **intervene sooner rather than later**
- For those waiting until the end of the first round to reassess where you're at, it's not too late as the economics of intervention make this the breakeven point, provided you don't delay further
- **Make accurate heat detection HIGH priority** for all farm staff. Review the basics; use high visibility heat detection aids; dedicate someone to spending time in the paddock between milkings to identify bulling cows

- Use short gestation bulls for 2nd round inseminations
- **Ensure plenty of bull power** to tail up the herd. As the number of bulls required will depend on the success of the AB phase, we can assist by crunching some numbers through a 'BullPower Calculator'

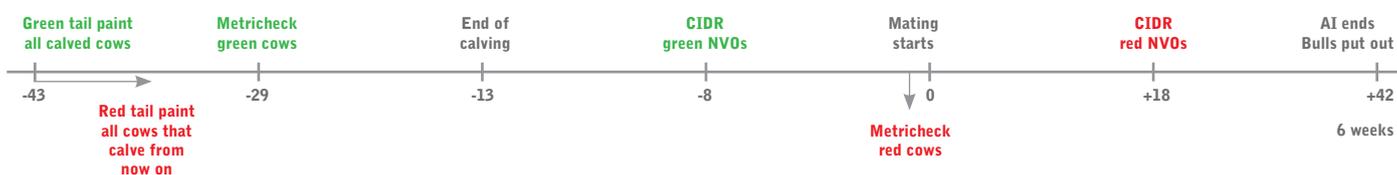
What is the value of knowing she has conceived to the date in the AB docket book? Seriously consider early pregnancy scanning of non-returns to service to get a handle on conception rate. Those found not in-calf and not cycling (i.e. 'phantoms') could still be eligible for anoestrus treatments and an AI service.

High priority groups to check would be all non-returns:

- Following early CIDR or Cue-Mate treatments (with or without resynchrony)
- 1st and 2nd calvers, or later calving 9+ year olds
- Submitted during the first 10-14 days of mating

**Mating is a critical part of the success and profitability of your farm. There is no time like the present to discuss what's best for you with your Totally Vets veterinarian - a proactive approach is always more useful and profitable, pregnancy testing time is too late!**

## MATING MANAGEMENT TIMELINE



NVOs=non-visible oestrus/non-cycling cows

# Bovine Viral Diarrhoea - taking the next steps

Craig Tanner

Here is a timely reminder of the potential cost of Bovine Viral Diarrhoea (BVD): a recent episode of ill-thrift with diarrhoea unresponsive to drenching in a mob of dairy yearlings rapidly progressed to heifer deaths and owner despair. Diagnostic tests confirmed a multi-factorial problem with BVD virus the underlying cause. At least one persistently infected carrier (or PI) has been found so far.

Sadly, the 9% mortality rate is not the only part of this picture. Affected but recovered animals have suffered significant growth checks that will compromise yearling mating performance and probably their lifetime

production. Further costly investigations are planned to identify other PIs and eliminate them from the herd as a whole. There is then a biosecurity risk to keeping BVD virus out that must be managed.

This is just one example of how BVD virus can wreak havoc in a herd, be it beef or dairy.

The key to controlling BVD is to prevent the birth of PI calves. **No PIs means no BVD!**

Having an arsenal of new diagnostic tests and effective vaccines at our disposal, along with increased disease understanding and awareness, BVD can be easily eradicated and controlled on most farms.

## THE CORNERSTONES OF BVD CONTROL ARE:

1. **Diagnosis** - cost effective detection and removal of ALL PIs
2. **Strict and permanent biosecurity** - knowing that any stock entering the herd is NOT a PI (e.g. breeding bulls, bought in cows) and that farm perimeter fences will prevent virus (re)-entry
3. **Annual surveillance**
4. **Vaccination** - aims to stimulate specific immunity to BVD and reduce the risk of producing further PI animals. This would

be critical in a herd from which BVD had been eradicated, but whose biosecurity could not be assured.

Many of you have taken the first steps towards BVD control by getting a sense of your herd's BVD status - through bulk milk +/- blood testing. The response to our BVD promotional campaign last autumn was fantastic.

Totally Vets' intention over the next month or so is to revisit all previous test results and follow up with appropriate bulk milk testing towards the end of calving. Specifically, we will be looking for significant increase in BVD antibody level as an indicator of likely recent introduction of a PI (e.g. heifer) to the milking herd. Alternatively, a PCR test will be recommended that identifies BVD virus in bulk milk so will directly check for the presence of PIs. The results will largely determine 'next steps'.

Along the way, your Totally Vets veterinarian will be piecing it all together and informing you of what's involved. Working through a BVD risk management checklist will determine your risk profile and enable an action plan for control to be tailored to your operation.

**For those wanting to know how to 'get started', don't be afraid to ask.**

## Pain-free disbudding



Totally Vets' professionally trained technician, Guy Haynes, is available to disbud your calves.

- ✓ **Pain-free:** the calf feels no pain.
- ✓ **Pain-free:** farm staff isn't tied up and can get on with their own jobs.
- ✓ **Pain-free:** quality job means no recalls to fix things up.

**Guarantee:** if notified before calves are 6 months old any re-growth will be removed at no charge.

**For procedure and pricing details please contact:** Hayley Smith at 06 323 6161, Julie Christensen at 06 356 5011, or Guy Haynes at 027 445 5424.

