



SOUTHERN RANGITIKEI VETERINARY SERVICES LIMITED

233 State Highway 1 Bulls & 48 Tutaenui Road Marton

SEPTEMBER 2019

DAIRY MOOSLETTER

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233 State Highway 1, Bulls

48 Tutaenui Road, Marton

Email: team@srvs.co.nz

www.srvs.co.nz

Tel (06) 3222 333

We have been very fortunate with the weather lately and the recent cold snap has reminded us that spring can be worse than winter at times!

Unfortunately, even with the mild weather conditions, we are seeing sick animals. We are diagnosing Cryptosporidium, Rotavirus in calves and Salmonella in both cows and calves. Please bear this in mind if you are experiencing issues and get in touch with us so that we can work through a treatment plan.

Attention has turned to preparing the cows for mating. Our vets are busy metrichecking cows and treating dirty ones, blood testing them for mineral status and getting mating plans sorted. We are also blood testing bulls for BVD and EBL and getting their vaccination status up to date for the mating season.

Our technician teams our busy disbudding all your calves. If you haven't had any of yours done yet please ring and get them booked in as soon as possible. The ideal time is calves between 2-8 weeks old—the bigger the calves, the bigger the job and it can be more time consuming and more stressful for the calves.

We have had a really good uptake and great feed back about the new product Tri-Solfen® which is applied to the wound bud after the procedure. It contains longer acting local anaesthetic and the feedback about the longer acting pain relief has been very positive. If you are interested, ask the techs at disbudding time and they can give you more information and can use it on your calves too if you wish.

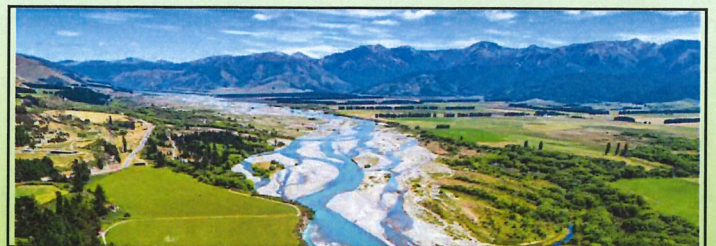
Action for Healthy Waterways—Have your say!

The Government is asking for feedback on proposals to improve the current management of freshwater by changing legislation and regulations. It is proposing amendments to the RMA and to a raft of other regulations and much of this stuff affects farming.

We all need to have a say!

Imagine having to get someone out from the council to give you a permit to plant a fodder crop, or put in a culvert, break-feed a riverside paddock or whatever.

We need to be involved all the way through the standard setting process or risk new standards / rules being completely unpalatable.



Go to www.mfe.govt.nz/consultation>action-for-healthy-waterways and click on submission
Submissions close 17th October 2019!

Theileria

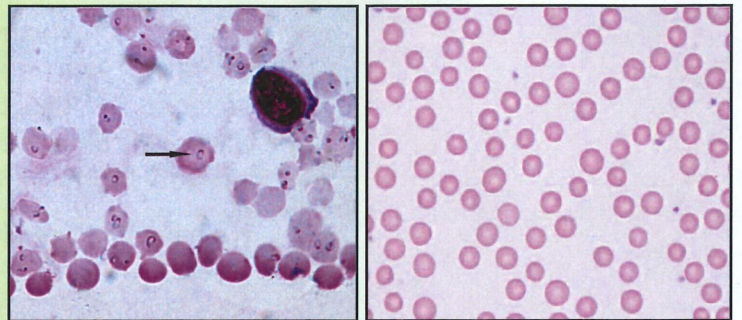
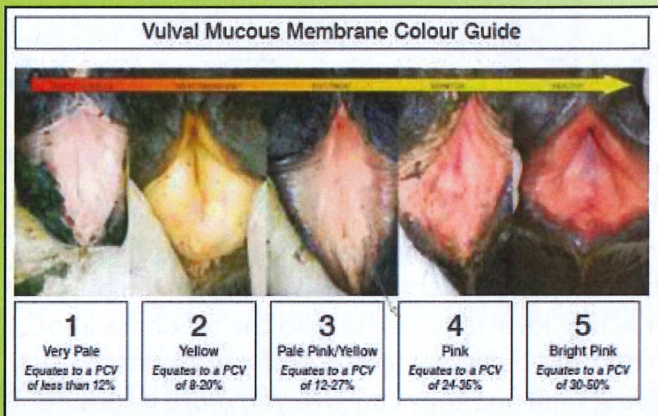
We have seen a few cases of clinical Theileria this spring already so this is a reminder to stay vigilant and on the look out for this disease. The earlier you notice the signs of lethargy and poor doing and the earlier you remove the stress off these affected animals the more chance of a good outcome.

Removing the stress means only milking these animals when needed, this may be once a day or this may be once every few days. Severely affected animals may not be able to be milked at all.

Energy levels need to be well maintained, so this means good feed, or supplementing with Keto-Aid drenches. Ensure there is no other disease process going on, no retained cleanings, no metritis, no pneumonia. Some of these animals will still not cope and may need a blood transfusion to survive.

The only way to tell is with us taking a blood test and measuring the number of red blood cells.

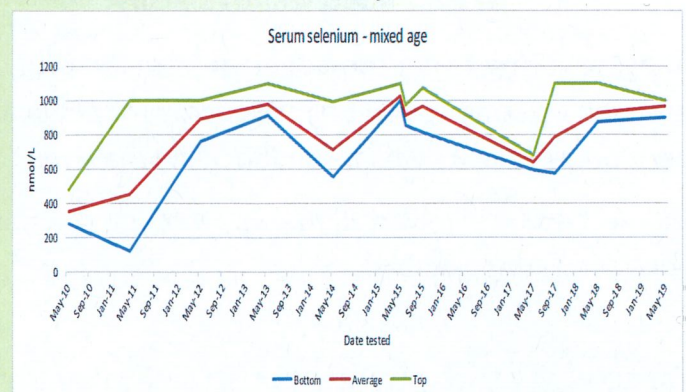
You can use tickicides to reduce the incidence of Theileria and now is a good time to do so. The ticks have spent the winter on the ground and now as the weather is warming up, the ticks jumping off the ground onto cattle for a good feed, so you can apply an effective pour on to kill ticks.



Pre-Mate Mineral Testing

Part of setting the cows up for a successful mating is to ensure their selenium status is optimal. Selenium is required for the immune and reproductive systems to function properly. Selenium deficient animals are at risk of disease due to an impaired immune response during the calving period which is when selenium levels are generally at their lowest and the cows are usually under the most amount of stress for the year. Selenium deficient cows also have poor reproduction performance.

We assess selenium levels of the herd by taking bloods off 4 or 5 animals with a range of ages and this gives us a really good gauge of what is happening at a herd level. We are on farm so frequently at this time of year that this is an easy job to get done when we are out for any other reason.



Weaner calves

October/November is usually the time you start weaning your calves. Individual heifers should have a proper rumen development by eating 1 kg of meal before they are weaned. This ensures the rumen papillae are well enough developed to cope with a grass diet. Weight can be used as an indication as well. Common weights used for weaning are 70kg for Jerseys, 80kg for Fr x J crossbreds, and 90kg for Friesians. When rearing calves, the most stressful issue we encounter is diarrhoea in calves. Unlike the pre-weaning diarrhoea, which is mainly caused by Rotavirus and Cryptosporidium, the main issues for post-weaning diarrhoea are Coccidiosis and Yersiniosis. Coccidiosis is the most common cause of post-weaning diarrhoea, it generally occurs after removal of coccidiostat, which is in the calf meal or milk replacer.

Clinical signs of coccidiosis are straining, mucus and blood in faeces, fever, off food and depression. Coccidiosis is diagnosed by identifying the coccidian in faeces. Treatment is usually specific in the form of an oral coccidiocidal drug (such as Toltrox®) as well as supportive therapy including fluids, pain relief. Sometimes antibiotics for a secondary infection may be indicated too.

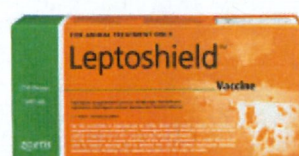
Yersiniosis is another cause of post-weaning diarrhoea, usually associated with calves over 6 months. This is caused by the over growth of a normally present bacteria in the intestine (in small numbers). This disease is associated with stress and mob outbreaks are seen when the calves are under stress, e.g. nutritional stress (during droughts), concurrent parasite burdens. Unhealthy calves (BVD, other disease challenges) are also more susceptible to illness.

Pneumonia can also be seen as the conditions get drier and dustier. Pneumonia is normally a bacterial cause but may be complicated by lungworm and viruses. The clinical symptoms are similar, which are labouring breathing, sometimes a nasal discharge and coughing, but always lethargy.

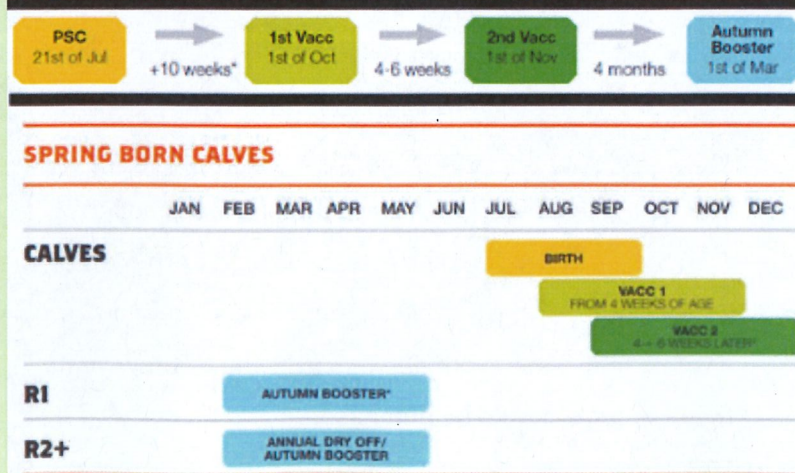
BVD can play a significant role in a lot of heifer mobs if the animals are not vaccinated. Often you won't see specific signs but BVD can affect calves immune status and cause ill thrift. If you do have BVD in the herd, you need to rule it out from any sick, underweight and scouring calves as soon as possible. The losses from BVD are not always visible, it can be reproduction losses, poor growth rates, and immune suppression. Preventing BVD by vaccinating your young stock should be part of your calf rearing plan, along with Leptospirosis vaccinations.

Don't forget about worm drenching as well. Ideally you want to use a double combination drench without abamectin. Abamectin can be toxic in little calves and therefore should only be used if they are over 120kg. Iver Matrix Calf® is a good choice for calves under 120kg as it contains a triple combination: ivermectin (very safe in small calves), levamisole and oxfendazole plus selenium and cobalt.

Is your herd covered for Lepto?



Suggested schedule (based on a 6 week calving spread):



Everything breeding Bulls!

Now is the time of year to start sourcing bulls both for heifer matings, and to follow the AB period in your cows. When it comes to reproductive performance it is often easy to overlook the importance of bull matings; but bull performance can have a big impact on reproductive success, especially when it comes to empty rates. So here are a few helpful reminders when it comes to everything bulls.

When: Bulls should ideally be on farm at least a month prior to going out with the cows/heifers. This gives them time to settle in, time to get acquainted with one another (if necessary) and time to be somewhat 'quarantined'.

Who: In recent years we have seen a big reduction in bobby calves on a number of the farms we service. Many have adopted the practice of using beef breed bulls (Hereford, Angus, Wagyu etc) instead of Jersey bulls to produce beef cross calves that are of higher value. This policy is often very rewarding when it comes to mixed age cows, but we do see a number of problems when the same practice is used for heifers. Even when bulls with really good Estimated Breeding Value (EBV) for calving ease are purchased, we still tend to see a greater number of calving difficulties in these heifers, leading to losses in calves, heifers and reproductive potential. If you do wish to use beef bulls for your heifers, always make sure your heifers have reached their growth targets, do your research about the bulls you wish to purchase (ideally don't use Hereford) and be prepared to assist when the time comes.

Whether over heifers or cows it pays to purchase virgin bulls (which are far less likely to be carrying any venereal diseases), bulls that will be older than 15 months but less than 3 years of age (they get more difficult to handle over this age) and ones that are an appropriate size to service your cows (if too big then damage to cows may result, if too small then servicing may be difficult).

Where from: Ideally purchase all bulls from the same supplier, and ideally from the same mob. Always ask for BVD and EBL clear certificates and make sure they are up to date with their BVD and Lepto vaccinations (this means sensitiser, booster AND annual vaccinations). If possible try to view the bulls yourself before purchase, assess temperament (after all you will be in the paddock with them at least daily for 6 weeks!), size, lameness, whether they have horns or not and don't be afraid to ask the owner about their own biosecurity practices.

How many: Heifers are easy, you should run one bull (often yearling – 18 months) per 15-20 heifers at all times. It doesn't hurt to also have a spare or two just in case one needs a rest. When it comes to cows a little bit more thought needs to be put in, and many farms often underestimate the bull power required for optimal bull mating's. You need to have a rough idea of how many cows won't be pregnant at the end of the AB period. In farms that use 6 weeks of AB this can simply be done by looking at your previous years 6 week in calf rate. Then use the table (supplied by DairyNZ) to figure out how many bulls are required. Note the comment at the bottom, that double the numbers are actually required for a full bull rotation, as one mob should be rested while the other mob works. So if you have a milking herd of 550 cows and a 6 week in calf rate averaging 65% over the last few years then ~14 bulls should be purchased.



Further testing: Not every bull purchased will actually be fit for breeding, it is often a case of buyer beware! Some farmers prefer to err on the side of caution when forking out thousands for breeding bulls. In this case we do offer further testing in terms of breeding soundness exams and semen quality assessment.

On farm: Keep an eye on your bulls, this is the most work they will do all year! Assess their ability to successively mate cows regularly (some will be good at the start but fail to perform as time goes on), watch for lameness issues (pull out and treat), watch that they aren't fighting with one another and that their body condition is good. Ideally leave them in the paddock when bringing the cows in for milking and inform your workers about the added risks of having bulls around.

No. cows in the herd or mob	Likely % of herd pregnant at start of bull mating					
	30%	40%	50%	60%	70%	80%
100	3	2	2	2	2	2
200	5	4	4	3	2	2
300	7	6	5	4	3	2
400	10	8	7	6	4	3
500	12	10	9	7	5	4
600	14	12	10	8	6	4

Table supplied by DairyNZ

Promotions

Iver Matrix Calf®
Ivermectin, Levamisole, Oxfendazole + Se & Co
1ml/10kg Oral
Available in 5L packs



For the treatment and control of internal parasites in cattle and sheep.

Iver Matrix® Calf is a triple combination drench.

Contains Ivermectin which has a much better safety margin than Abamectin.

Drench of choice for under 120kg calves.



BAYER

\$10 OFF COLLARS
AND BUY 6, GET 1 FREE
Limited time offer

#8MONTHSOF FOCUS



seresto

Salmonella

As we mentioned in our monthly notes, we have had an increased incidence of Salmonella in the district this spring. If you have ever dealt with this disease then you are fully aware of the stress and potential devastation that it causes. Salmonellosis is an intestinal infection and normally presents as one i.e. scouring, but can also present as a very acute septicaemia (death occurring without a scour developing), or as abortion.

Overcrowding, calving time and sudden diet changes are the more common times salmonellosis is seen. Calves can be affected as well as yearlings and adult cows. Syndromes associated with Salmonellosis include:

- 1) Development of the carrier state after infection and no symptoms were seen.
- 2) Mild clinical signs of diarrhoea with little other systemic involvement. These cases are usually sporadic.
- 3) Severe diarrhoea accompanied by septicaemia, depression, bloody mucous diarrhoea and a high temperature. Intestinal lining is usual present in the faeces. These cows do not eat or drink and get very dehydrated very quickly. These animals can die very quickly, even with treatment.
- 4) Pregnant cows can abort, and these calves can be in a more advanced state of decomposition and membranes are commonly retained.
- 5) Infected calves can have a scour, as well as joint infections or brain infections. They can be found dead with no signs at all.

Treatment can be intense with variable success and therefore attention is focused on prevention and control. Prevention is based on reducing the risk or acquiring infection, minimising the spread of infection, and enhancing the immunity of animals within the herd. Vaccination of cattle is a key tool in prevention, and is very cheap too. It is also key in reducing the spread of disease in the face of an outbreak.

Vaccination can also be used in any herd to minimise the risk of an outbreak, or the severity of it if it does happen. Just like with any vaccine, 2 initial doses are needed 4 weeks apart, then it is a yearly booster after that. It can easily coincide with your annual lepto vaccination to make it easy. Please have a discussion with your vet if salmonella vaccination is something you would like to take further.

SALMONELLA

SIGNS OF
SALMONELLA:
DIARRHOEA OR
ABORTION

RAISED TEMPERATURE
COWS HOLD THEIR CLEANSINGS

Abortions,
Dead calves,
Dead cows,
Scour
outbreak.

SALMONELLA IS A ZOOONOTIC
DISEASE I.E. SALMONELLA
INFECTION CAN POTENTIALLY
POSE A SERIOUS THREAT TO
HUMAN HEALTH.

PROTECT
YOUR STOCK BY
VACCINATING YOUR
CATTLE

VACCINATION PROTOCOLS:



Calves can be vaccinated from 3 weeks of age and require 2 doses given 3 weeks apart.



Pregnant cows and heifers which have received their primary vaccination course can receive a booster vaccine 3-4 weeks prior to calving.

HOW DOES SALMONELLA ENTER A HERD?

- REPLACEMENT STOCK - PURCHASED STOCK
- SPREAD THROUGH PHYSICAL CONTACT - BIRDS, FARM VISITORS ETC.
- ANIMAL TO ANIMAL SPREAD
- SLURRY - PERSISTS IN SLURRY FOR >1 MONTH AND IN SOIL FOR >1 YEAR
- FEEDSTUFFS / WATER - WATER COURSES INFECTED BY NEIGHBOURING STOCK, RODENTS OR BIRDS CAN INFECT MEAL FEED.

Non-cycling cows

Non cycling cows are a nuisance and also have a large impact on 6 week in calf rate. This is important because if we can directly increase your 6 week in calf rate by detecting and treating non cycling cows, we can in turn reduce the non-pregnant percentage/empty rate of your herd. This also has flow on effects the following year as an early calving cow gives you more days in milk and also a much better chance of conceiving early the following season.

When to treat non-cycling cows?

Treating non-cycling cows early is becoming more common practice as the benefits far outweigh treating them later. It may be true that the longer you leave your non-cycling mob the less you will need to treat, but this is counter-intuitive for receiving the financial gain. The real gain you get from treating this mob early is in the days in milk the following season. Remember by treating non-cycling cows early you receive on average 19-21 days extra in milk production next year. Other advantages you get from treating early are:

- More compact calving over a shorter period.
- Treated cows calve earlier, and have more days in milk.
- Fewer non-cyclers the subsequent season.
- Faster genetic gain and additional AB heifer calves.
- These benefits far exceed treatment cost even when the pay out is low.

Treating cows 10 days prior to the start of mating means that these cows will be inseminated on day 1 of mating. Furthermore, if some of these cows fail to fall pregnant from the non-cycler program, subsequently their return heat in week 4 of mating will be more fertile.

	DIB-Synch Plus Program	DIB-Synch with 3ml of PG
Additional days in milk	19	21
kg MS / day	1.6	1.6
\$ / kg MS	\$6.75	\$6.75
Additional milk income	\$205	\$227
Costs	\$47	\$50
Profit	\$158	\$172
Return on investment	4.3 : 1	4.5:1

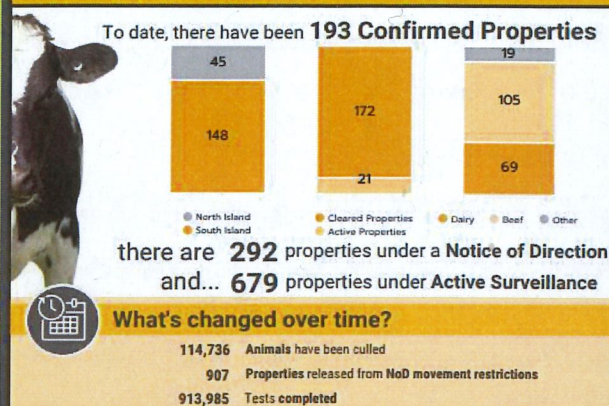
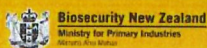
Table: Taken from Agrihealth website

The above table shows the benefit you receive from treating your non-cycling cows early. The extra days in milk translates into a great return on investment. The original DIB-synch Plus program the return on investment for treating a non-cycling cow was 4 to 1, even when the payout is low there is still a financial gain when treating non-cycling cows. Further to this more research has been done in this area with increasing the dose on prostaglandin being used in the program. The researched showed that we were getting better responses to treatment and subsequently a larger return on investment due to higher conception rates of cows that are treated.

An early conversation around the subject now will prove ultimately far more valuable and constructive than a reflective one in autumn at scanning time, or next spring when calving drags out. Once late September/early October arrives, much of the scene on the farm is set for how mating (and next season's calving) will play out. Ensure tail paint is on 35 days before mating starts so you at least know what is happening and have a plan set in place for treating the non-cycling cows early to receive all the benefits.

Update on Bulk Milk Tank Screening for *M. Bovis*

Mycoplasma bovis Eradication Programme update



Compensation

1,408	Claims received by MPI
1,080	Claims completed or with part payments
\$108.1 million	Value of claims assessed
\$95.1 million	Value of claims paid
25	Days to complete claims (4-month rolling average)

Explanation

CONFIRMED PROPERTIES - all properties over time that have been determined to have had *M. bovis*.

ACTIVE PROPERTIES - properties with *M. bovis* that are currently under a Restricted Place Notice, and which are waiting for depopulation and cleaning and disinfection. This includes all properties that would previously have been described as Infected Properties.

CLEARED PROPERTIES - properties that have had *M. bovis* and have been depopulated, cleaned and disinfected, and have had restrictions lifted.

NOTICE OF DIRECTION - A legal direction that restricts the movement of animals and risk goods off a farm where it is likely they have received a transfer of cattle from an infected farm, and testing is underway.

PROPERTIES UNDER SURVEILLANCE - Properties that may have a risk of having *Mycoplasma bovis* and testing has begun.

OTHER FARMS - Includes lifestyle blocks and calf rearers.

Last updated 18 September 2019

This infographic is updated weekly

Ministry for Primary Industries



Most of you will be well aware that MPI are continuing the screening of all bulk milk for *M bovis* this season. There has been a slight change in the testing on samples collected since April 2019. Since then they have been using the ELISA test to look for antibodies. The previous test was a PCR test that looks for the actual *M bovis* bacteria. The new test is much more sensitive than the PCR test was, so they are more likely to pick up all the herds that are infected with *M bovis* which makes it an effective tool for *M bovis* eradication. Unfortunately, the heightened sensitivity also means they will detect antibodies to other *Mycoplasma* sp and therefore we end up with false positive results.

From April 2019, samples were stored until the test was up and running (due to test validations). Testing only started on these samples in June 2019. This delay in testing has meant there has been a delay in getting the results to farmers. Only in the past few weeks have farmers been informed of test positive results from back in May.

Getting a positive milk test has immediate implications for the farm, and obviously is a very stressful time for farmers. The process generally starts with legal papers being served, placing the farm under a Notice of Direction (NOD). Broadly speaking, this means that no animals or animal products are allowed to be moved off the farm without permission. If animals are given permission to leave, they may

only go to the works. At this time of year this can affect calves sold and bulls going off for mating. Bobby calves may still go to processors, but no calves can go to the sale or be on sold privately. Milk is still allowed to be sold to processors where it will be pasteurised (i.e. milk may not be sold to calf rearers). Once this Notice is in place, MPI gather a lot of other information about your on-farm practices. The second thing that happens is a whole herd census is undertaken, which means they need to scan the NAIT tags of every single animal you own. The third thing that happens is that further testing is undertaken, in the form of blood sampling cattle (who and how many is decided by MPI).

As of the end of July 2019, 9825 farms had been tested in NZ with the new test and 154 farms had come back positive and were therefore placed under Notice of Direction, 17 of which are in the Manawatu-Whanganui area. MPI expect to find a number of false positive farms within the results. They do not expect to find a large number of infected dairy farms outside of the network of already known infected farms, and farms associated with them via the trading of live cattle and milk. If MPI have not been interested in your farm because of trace animal movements, then the likelihood of the milk test being a true positive or that they are truly infected is low (about 7%). If your farm is connected to the network of infected farms, or if your farm has had more than one bulk milk test come back positive, then the likelihood that they are truly infected is higher, up to 40%. These likelihoods warrant MPIs forward movement restrictions to prevent onward transmission. As the eradication of *M bovis* continues, this likelihood will become smaller and smaller as the prevalence in the population decreases.

If you do get a bulk milk tank positive test, only you get told. Due to the Privacy Act 1993 MPI cannot inform anyone else, even us as your vets. We are here to support you, but if you need our support you will need to come to us. We can help you understand the testing, discuss farm practices and anything else you need – even just moral support, as this will likely be very stressful for you and your family if you have to go through it. MPI are currently working on a way to inform farmers if the BMT is negative for *M bovis* to provide some assurance for you guys, but they are not there yet. In the meantime, the most important thing you can do is keep your NAIT records up to date so that all cattle movements can be accurately traced.