

FRANKLINvets update

BVD control the next step!

Jason Fayers BVM&S, Cert CHP

Since we carried out our practice-wide BVD bulk milk sampling survey, we have seen a significant increase in farmer awareness of BVD.

The survey showed that a third of farms had very high antibody levels and were either currently infected or had recently been infected with BVD. The questionnaire also showed that there are very few farms with tight enough biosecurity to prevent BVD entering their herd at some stage in the future.

Vaccination is effective at preventing foetal loss and the economic losses due to reduced reproductive performance caused by BVD infection. It is also effective at preventing infection or re-infection in herds with inadequate bio-security (i.e. the vast majority of herds).

The gold standard of BVD control is vaccination and eradication of PI animals (persistently infected shedders of BVD virus).

Studies from the US indicate that even in herds that are vaccinating, the presence of PI animals can reduce production of the herd by 2-3%. This is probably due to the biological effort animals have to expend to mount an immune response against the virus.

Similar studies show a decreased rate of liveweight gain in vaccinated beef calves that are exposed to PIs compared to un-exposed animals. Again, this indicates that eradication of PIs from young stock is a good idea.

How are PIs born?

Over 90% of PIs are born from non-PI dams that are infected with the virus at less than 120 days of pregnancy. In addition, a PI dam will always give birth to a PI calf.

An effective vaccination program will reduce the number of PIs born by over 90%. However, there is still a risk that there may be PI cows in the herd giving birth to PI calves.

What's the next step?

If you are vaccinating your herd, the next step is PI removal. In most herds that have been vaccinating for 2-3 years or more, it is likely that your herd will be free from PIs, but it is important to make sure!

To check the milking herd, bulk milk sampling is the easiest option. The LIC BVD monitoring package involves 3 bulk milk samples collected by Fonterra at strategic times, and is an easy and cost-effective way of monitoring your herd. This should be carried out on an annual basis to check that no PI heifers enter the herd in the future (see below).

To check the replacement heifers, there are 3 options:

1. Blood test all calves. The ideal time is at de-budding. If you are using our de-budding service, we offer a heavily discounted price for blood testing heifers.
2. Blood test a small group of 8-10 calves at their first leptovaccination. If this sample tests positive, it indicates the presence of a PI in which case we need to bleed the group.
3. If the herd has been tested clear for PIs, regular monitoring of the bulk milk will detect any PI heifers that come into the herd.

If you have decided not to vaccinate, or are unaware of your BVD status, the LIC BVD monitoring package is strongly advised as an annual monitoring tool. This at least allows you to detect BVD if or when it enters your herd so that you can respond before it causes too much havoc!

Please give us a call at the clinic so that we can discuss the best options for your herd.



September 2011

INSIDE THIS ISSUE

BVD Control - the
next step

The experts say:
Early intervention is
the way to go!

Condition score your
cows now to score at
mating time

Using Milk Protein %
to monitor nutrition

WOF time for this
season's lambs

Bull Soundness



FRANKLINvets

The experts say: Early intervention is the way to go!

Jason Fayers BVM&S, Cert CHP

3 reasons to metriceck early this season:

1. **Check early or miss the signs** – The uterus contracts down from its massive size at pregnancy to its pre-pregnant size over just 3 weeks. During this period, any infection or discharge is squeezed out into the vagina. Except in very severe cases, from 3 weeks on, pus stops being squeezed out into the vagina. This means that these cows may not be picked up at metriceck time, despite many of them still being infected.
2. **Missed cows are less fertile!** – Missed cows have what we call sub-clinical infections. This is a bit like sub-clinical mastitis; we can't see the infection but pus is still present. In this case, the infected cells are in the uterus, rather than the udder. It should come as no surprise that sperm cells struggle to move through a uterus lined with pus and infection. Even if they do manage to survive, the embryo won't. Studies have shown that cows with sub-clinical uterine infections have conception rates up to 50% lower than un-infected cows.
3. **Missed infections cost you money!** – Putting AI straws into a uterus lined with pus is clearly a waste of money! However, the main cost is the increase in the number of days it takes for subclinically infected cows to conceive and the resulting reduction in days in milk next season. At a \$7 payout, every lost day costs you over \$10!

There are various ways you can group cows for early metricecking, ranging from 2 to 4 batches. How we organize this will depend on your herd size, calving spread and whether you are in a rotary or herringbone shed. Give us a call and we can discuss the best option for your situation.

Non-cycler treatments- Good payouts mean good returns!

- On average, a cow treated with our Prosynch Plus Cuemate program will calve 14 days earlier than an untreated non-cycling cow
- At a \$7 pay-out and with an average daily production of 1.5kg MS in the early part of the season, there is a return of around \$100 per treated cow, over and above the cost of the program.
- To allow 24 days of pre-mating heats, with Cuemates being inserted 9 days before the start of mating, tail paint or scratchies should go on 33 days before the planned start of mating.
- Remember, early treatment yields the best results, so get that tail paint on early.



Condition score your cows now to score at mating time

Greg Lindsay B.VSc

Winter weather again managed to put a slight dampener on the very favorable farming conditions we experienced through the first half of the year. All is not lost however; with a warmer spring now upon us, we can expect further increases in pasture growth rates and good surpluses.

Strict grazing management over the wetter months has, in some cases caused significant drops in herd body condition score. Cows are expected to lose condition post-calving as they attempt to make a smooth transition from dry to milking cow. Ideally, condition score loss over this period should be limited to 1 BCS, meaning that a herd calving down at an average condition score 5 will commence mating at condition score 4. A greater loss of condition has a significant impact on fertility, as shown by NZ research, with reductions in 6 week in-calf rate of 4-5% when cows commenced mating at 3.5 compared with 4.5. In contrast, cows gaining weight prior to mating are more likely to become pregnant earlier. This effect is smaller however; 2% more pregnant at 6 weeks and 1% more pregnant at 12 weeks if cows are gaining weight at 0.2kgLW/day compared with cows losing weight at the same rate.

We recommend a herd condition score 2-4 weeks prior to planned start of mating, to ensure plenty of time for corrective options to be fully examined. At this stage of lactation, the *In Calf* book recommends no more than 15% of the herd be below body condition score 4.0 and that from planned start of mating, cows should be gaining or at least maintaining liveweight. If there is any uncertainty as to whether your herd will meet these targets, talk to your vet about having a pre-mating body condition score performed using our Infonet software soon.

Fore!

Ross McDonald

Friday 1 July dawned fine and sunny, a great day for a birthday. Damn! That boss of mine wants me to lead a team in the Taupiri Squash Club Golf Day..

Our team consisted of an assisted immigrant vet from South Africa, a half broken farmer from Te Akau, me and a low-handicapper from Matangi to boost the team.

We played hard and fast and sometimes fair, finishing as the top sponsor's team. Hennie was certainly our saviour on more than a few holes, not bad for a supposed "sometime golfer!"

Funds raised went to a good cause and the team certainly helped out at the bar and at raffle time to further assist the squash club's fundraising effort. Hennie took home a compost bin for Jacqui, while the rest of us won socks and golf balls.

Team Members: Ross McDonald (captain), Hennie Lock, Tony Cocker and James Pehi.

Using Milk Protein % to monitor nutrition

Greg Lindsay BVSc

Daily tanker docketts are the first port of call for farmers wanting to gauge how well their herd is performing. They provide us with very useful snapshots of farm production data and information on milk quality. A section seldom used on these printouts is the breakdown of milk into its protein and fat components. When monitored, these values offer a huge insight into the dietary health of the herd and as we know, when cows are fed well, they produce well.

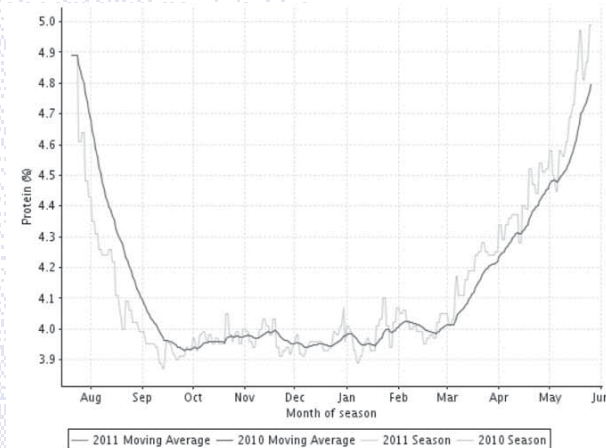
Milk protein is arguably the more important of these two components. The percentage of protein in milk directly relates to the amount of energy a cow receives from her diet. If she consumes adequate amounts of a high-quality, high-energy diet, she will in turn produce milk with a high protein percentage. Conversely, if a cow's diet is not providing enough energy, her milk protein percentage will be low or declining.

Throughout the season, milk protein will rise and fall in tandem with herd dietary changes. Changes in milk protein % will often occur before you see any change in overall production so a drop in protein is a great early-warning system that all is not well. Monitoring these changes using docketts can be difficult, but when graphed over time, changes become much more obvious. Franklin Vets has invested in a system called Infovet that allows us to download these graphs very easily. They take some skill at reading, but we have found them a fantastic tool to help our clients monitor and troubleshoot nutrition issues on farm. You can also find these graphs through Fencepost.

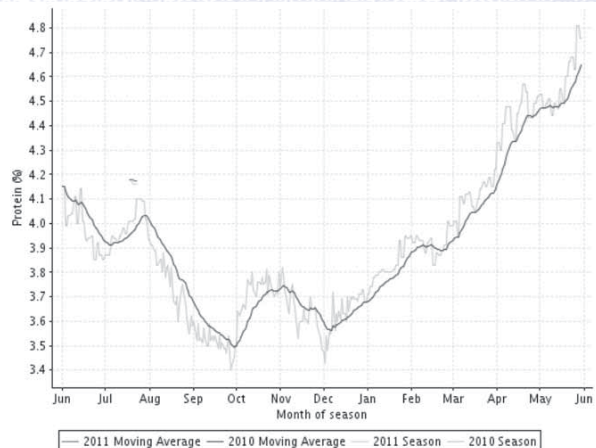
The Australian In calf study identified low milk protein as a key difference between farms with good reproductive performance and those with poor performance, reflecting what an important tool it can be on farm.

The protein curves shown below are from two very different farms. A curve like that of Farm A is ideal and reflects the normal shape we would expect to see through a lactation which resembles a "tick". We are looking for a stable curve that holds at a high milk protein % in early lactation, gets on a rising plane through mating and consistently climbs for the rest of lactation.

Farm A



Farm B



The second graph from Farm B shows much more variation, especially through November and December, reflecting a drop in intakes over the dry spell. This played havoc with the mating on this farm and many others in the district.

With vats starting to fill again, avoid running into problems this season by keeping an eye on your protein levels and if you are at all concerned or haven't seen your farm's graph, don't hesitate to get in touch.



WOF time for this season's lambs

Quirien Domper B.VSc

Spring has sprung and summer is fast rolling in, so it's time to think about your checklist for docking.

If you vaccinated your ewes pre-lambing, the antibodies in the colostrum will have given these lambs protection from birth. However, at 8-12 weeks of age, that maternal antibody protection is wearing off and fast-growing lambs will be susceptible to clostridial diseases such as pulpy kidney and blackleg.

If you did not vaccinate your ewes pre-lamb this year, the risk to your valuable lambs is even greater. Using Lambvax for these lambs should be a priority to provide immediate protection against tetanus and pulpy kidney. A clostridial vaccine such as Ultravac® 5-in-1 is cheap insurance against preventable losses and strongly recommended for lambs at docking with a booster in 4-6 weeks.

Don't forget if you have scabby mouth on your property, Scabguard® vaccination at docking is advisable. Scabby mouth is a painful and highly infectious viral disease that will result in reduced growth rates. Vaccination is the best way to avoid this set back.

Lighter ewes may benefit from a drench at docking, particularly those not treated with a capsule pre-lamb. This will not only improve milk production, resulting in better lamb growth rates, but will also reduce potential pasture larval contamination for lambs starting to graze.

Internal parasite burdens in lambs will certainly check growth rates but tapeworm in particular can increase dag formation. This will increase the risk of flystrike in these animals. Using a lamb drench which includes a tape-specific active such as First or Ivermatrix Tape may be suitable for your farm. Contact your Franklin Vets team for advice.

Fly challenges in this area can start as early as October, so don't forget to treat lambs at docking to prevent fly strike of the docking wound. With increasing levels of triflumuron and diflubenzuron resistance in both the Australian green blowfly and the common green blowfly, not all products may be effective on your property.

Talk to Ross McDonald, Matt Airey or your veterinarian at Franklin Vets to formulate a fly protection plan and drench program that best suits your farming system.

Regional Sponsors of
Auckland/Hauraki Dairy
Industry Awards 2011



Passion for Progression

Sponsors of Netball
Counties Manukau
Region supporting the
Netball communities of
Papakura, Pukekohe &
Waiuku



Proud Sponsor of
Taupiri Rugby



PAPAKURA
Veterinary Hospital
Farm Services and Supplies
Ph 0-9-298 8575
OPEN 7 DAYS

PUKEKOHE
Veterinary Hospital
Farm Services and Supplies
Ph 0-9-238 2471
OPEN 7 DAYS

TAUPIRI
Veterinary Clinic
Farm Services and Supplies
Ph 0-7-824 6836

TE KAUPHATA
Veterinary Clinic
Farm Services and Supplies
Ph 0-7-826 4838

WAIUKU
Veterinary Hospital
Farm Services and Supplies
Ph 0-9-235 9101
Farm A/H 0-9-238 2471



Bull Soundness

Hennie Lock B.VSc

With mating season closing in on us, it is time to start thinking about the bulls needed for natural mating.

There are several points to consider to minimise the risk of bulls having a negative impact on your herd's reproductive performance:

- Bull age:** 15 months - 4 years is ideal
- Bull to cow ratio:** 1 bull to 25-30 cows. Will need to double the number to enable bull rotation
- Bull management:** Rotate groups and keep them off the yards; remove and replace lame bulls
- Evaluate and monitor serving ability** while bulls are with the herd. Every bull should be able to successfully mount and penetrate the cow
- Disease tested and vaccinated:**
 - Test for BVD and EBL and vaccinate for BVD. Any booster vaccinations should be completed at least 2 weeks prior to joining with cows
 - Testing for venereal diseases like Trichomonas and Campylobacter are not routinely included in the soundness evaluation and are uncommon in virgin bulls.
- Bull soundness and fertility:** We offer a bull fertility and soundness assessment at Franklin Vets

Testing for soundness and fertility includes the following:

- Evaluation of overall appearance**
 - Avoid overly-aggressive bulls

- Should be no less than $\frac{2}{3}$ the size of mature cows and no more than $\frac{1}{3}$ bigger
- Good legs and claws for walking
- No deformities of the head and mouth
- In good condition but not over-fat

- **Examination/palpation of the reproductive organs**

- Scrotum circumference is a good indicator of puberty and semen capacity
- Testis should be elastic and an even size without any lumps
- The penis should be free-moving in the sheath with no visible defects
- The internal sex glands should be of normal consistency and size

- **Semen collection and evaluation**

- 5-20% of bulls have semen quality issues. If this is one of the dominant bulls it can severely impact on your herd's empty rate
- Semen is collected with an electro-ejaculator and evaluated for motility and morphology

It is important to plan ahead and get enough sound breeding bulls on farm well ahead of mating. Talk to your Franklin Vets team today for advice on bull management or to schedule a soundness and fertility exam.