

Quarterly News and Views

Over the Fence Greetings from Wanganui Vet Services

October 2014 • Issue 21



Inside this Issue:

- >> Advantages of high growth rates in lambs
- >> Animal health for lambs
- >> Treating Non cycling dairy cows
- >> Heifer synchrony
- >> Mating yearling beef heifers
- >> Bull management
- >> Uddering ewes
- >> Bloat

Animal Health Reminders

For the next three months:

- Animal Health Reminders
- Calf Dehorning
- Treat dirty cows
- TB Test Deer
- Finish lambing-vaccinations drenching
- Scabivax at docking
- Magnesium supplementation beef cows
- Premating cow blood testing
- BVD test bulls

Well, we have had an easy winter, a great spring for lambing and now we are getting the rain just as we need it – looking like an excellent year at this stage. Everything, apart from the dairy payout, is getting well set up for the summer with stock in good order and grass on the move properly now.

No doubt everyone is looking forward to another docking – I hear people mention the number of dockings they have to go till retirement and I sympathise – docking is a great time to test relationships and tolerance levels (fuse length) of the mustering team in particular. However, it has to be done and the early indications are that percentages are looking very promising as lamb survival has been so good through the lambing period.

Three of us vets have just recently returned from three weeks in South America with a group looking at various farms which was great. We could not have done that in years gone by as we would have been far too busy calving cows, treating metabolic problems, treating mastitis etc etc. Farming has changed in many ways and one aspect of this is that spring is now nothing like it used to be on the veterinary calendar. You farmers are now so much more knowledgeable about preventative measures and competent in fixing problems that we old vets are becoming dinosaurs!

Prevention is everything these days, so remember that we have an excellent team in all areas keen to help you to in any farming endeavour. We have been around long enough to ensure we give you practical solid advice / assistance in many areas. We really enjoy being involved in making any farm enterprise more successful.

Enjoy that docking

ANIMAL HEALTH: LAMBS

Attending to animal health is essential for lambs to achieve top growth rates and high dressing out %.

Worms: Drenching for round worms and tape worms at the right time with the right drenches is required. Lambs start eating significant amounts of pasture by 4-5 weeks and can start showing signs of parasitism (dirt tails) by 8-10 weeks especially if there is a high degree of larval contamination of pastures. The first drench needs to be given before there is gut lining damage due to worms as this damage will significantly slow down growth rate. The timing depends on the degree of pasture contamination; type of feed; weather conditions; stocking rate and length of feed. The best way to find out when to drench is to do some faecal egg counts on a sample of about 10-15 lambs at strategic times.

Fly Strike: Will seriously affect the health and growth of lambs and cause death in serious cases left untreated or left too long. It's important to prevent fly strike from happening so ensure you have an effective control programme in place. There are many effective chemicals on the

ADVANTAGES OF HIGH LAMB GROWTH RATES

The average daily growth rate of lambs in NZ is probably about 150grams per day but if born at a good weight; fed well at birth and up to weaning by providing ample top quality nutritious feed; gains of 400grams+ are achievable with the right genetics.

During early lactation pasture cover should be at least 1500kilograms of dry matter per hectare (4-5cm in length) under set stocking and if top quality highly nutritious feed is provided with an ME about 12 than high growth rates are achievable.

Lamb growth rate up to weaning and beyond is heavily dependent on ewe milk production. The onset of lactation (and colostrum production) is affected by ewe nutrition in late pregnancy while feeding level during lactation influences total milk production.

Ewes reach peak milk production two to three weeks after lambing. Milk production gradually declines after 8-10 weeks as lambs eat more pasture. Ewes mobilise body fat to buffer feed shortages and maintain milk production in the first 3-5 weeks of lactation. Feed restrictions affect ewe weight at weaning more directly than lamb weight.

Lambs of well fed ewes grow a lot faster than those on less feed; often greater than twice the growth rate.

Advantages of rapid growth:

 A lamb born on 1st September at 4.5kg live weight' growing at 400grams per day reaches 37kg (16.6kg carcass weight) on 20th November (81 days) and often sold at a premium

- Most rapidly grown lambs can be sold off mother
- Lamb dressing-out percentages are higher
- Lambs subject to less parasite challenge and fly strike therefore less checks and animal health costs
- A greater proportion of lambs catch the early premium of the chilled trade markets
- Considerable feed otherwise eaten by lambs is freed up for other stock.
- A great advantage of growing lambs fast is that less overall feed is required to achieve an acceptable weight.

Similar advantages apply after weaning as the following table shows.

FEED CONSUMED FOR DIFFERENT LAMB GROWTH RATES AFTER WEANING

	Lamb Growth Rate (grams/day) from 24-34kg LWT			
	100	200	300	400
Feed requirement (kgDM/day)	1.2	1.5	1.9	2.4
Days to target weight (34kg)	100	50	33	25
Total feed consumed (kgDM)	120	75	63	60

To achieve 400grams/day after weaning again requires top quality high ME feed i.e. clover dominant pasture; plantain and clover or crops e.g. pasja



market; pour ons; spray ons; jetting materials and dips. Talk to Tom about the best cost effective option for your operation e.g. if selling lambs early you will need to use a product with a short with holding period.

Pulpy Kidney: Pulpy kidney can cause sudden death especially in bigger lambs and usually before Xmas when lambs are being fed top quality feed. To get high growth rates; lambs need top quality feed but top quality feed is more conducive to pulpy kidney. The answer is compulsory vaccination. Vaccinate ewes with 5 or 10 in 1. They need

two shots 4-6 weeks apart as hoggets or two tooth's in their first year of lambing before lambing then an annual booster prior to lambing after that. This will deliver immunity via colostrum to new born lambs and will protect up to 3 months of age. After that lambs will need to be vaccinated themselves for continued protection.

Scabby Mouth: Properties that have the scabby mouth virus present can affect young lambs causing horrible crusty sores around the mouth, nose and face seriously affecting growth rate. Vaccination at docking is the only prevention, and once vaccinated you will need to continue, as the vaccine contains live virus that will be introduced to the property.

DRESSING-OUT PERCENTAGES IN LAMBS

Lambs will soon be drafted for the works based on weight and body condition. There are a few factors that will vary the dressing out % that are worthwhile considering when sorting up lambs that will affect income.

Trial work done at Ruakura showed that:

- Average dressing out % of all lambs with a full gut was 42.2%
- Average dressing out % of all lambs fasted for 12hours with an empty gut was 45.4%

The same trial found that the following factors affected dressing out % (DO %)

- *Liveweight:* DO% increases with increasing weight. Lambs at 20kg dressed out at 39.5% on average. Those at 50kg dressed out at 45.5% on average.
- Farm differences: DO % can vary between farms and on the same farm can vary between seasons so the DO % relationship needs to be established for each farm. Differences of up to 1-2kg carcass weight occur between different farms for lambs of the same live weight
- *Gut-fill:* Variation of up to 2kg live weight can be expected depending on the degree of gut fill. Gut fill can vary at different times of the day and between days. Lambs fed very fibrous pasture can have very high gut fill and those on succulent leguminous type pasture can have lower levels of gut fill. Those with an empty gut will be even lighter.
- Sucked and Weaned Lambs: Weaned lambs have lower DO % than suckling or milk lambs (mainly due to increased volumes of gut-fill) In a trial comparing DO % of lambs weaned at 12 weeks and slaughtered at 15 weeks was



2-3% lower than from un-weaned lambs slaughtered at 12 weeks of age.

- **Birth Rank and Sex:** Twins with similar live weights to singles will have carcasses that weigh 0.2 to 0.3kg less. Male lambs have less fat with 25% lower fat cover than wether lambs which are in turn leaner than ewe lambs of similar weights. As increased carcass weight without increased fat cover is the main basis for farmer payment. The growing of ram lambs or cryptorchid lambs provides one management practice that can increase farm income.
- Breed: Breeds that have genetically higher wool production tend to have lower DO %. As an example at the same live weight shorn Southdown cross lambs had a 0.7kg heavier carcass than shorn merino cross lambs. For a 35kg live weight lamb this meant a 2% higher DO % for the Southdown cross.
- Lamb fatness: Fatter carcasses have higher DO %. As lambs fatten, a relatively higher portion of fat is laid down in the carcass than in the remaining body thus increasing DO%.
 P- grade lambs dress out at about 2% higher than Y- grade lambs which in turn dress out 1% higher than alpha lambs.

MATING YEARLING BEEF HEIFERS

There has been a general reluctance for beef farmers to mate their yearling heifers.

The following reasons were given:

- More difficult calvings
- Some heifer deaths
- Too many dead calves

- Rear lighter calves than 3 year old heifers.
- Have reduced fertility subsequent to their first calving.

However to the contrary, there are some farmers who do mate yearling heifers successfully and reap the benefit of increased returns.

The keys to their success are as follows

• Only mate yearling heifers greater than 300kg.

TREATING NON CYCLING DAIRY COWS EARLY IS A SOUND INVESTMENT

Optimal calving patterns are focussed on cows calving early in the calving period; as they have longer lactations, have higher chances of conceiving early in that season's mating period and the farmer may better match feed supply. With inductions to be banned in the near future farmers are relying more on other reproductive management tools to ensure a good calving pattern. The 6 week in-calf rate is a key measure of calving spread and the national target is for >78% of cows to conceive in the first 6 weeks. The 6 week in calf rate is positively associated with farm profitability.

Blanket treatment of non- cycling cows prior to the start of mating is a sound investment and will tighten up the calving pattern. Robust New Zealand trial work shows early treatment before mating gives the best return on investment compared with treating later in the mating period.

Early treatment gives

- 10-16 days more milk
- Cows get in calf earlier
- Tighter calving pattern
- More AB calves

HEIFER SYNCHRONY

Synchronising dairy heifers so they can be fixed time artificially inseminated has the following advantages

- Compacting the calving pattern with more days in milk and increased income
- Compacting calving over a shorter period makes feed management easier

RETURN ON INVESTMENT

Additional Income	Treatment	GPS & Progesterone Implant
Extra days in milk	0	16
KgMS/day	0	1.5
\$/KgMs	\$7	\$7
Proportion extra AB Calves	0	0.1
Value of AB Calf (over Bobby Calf)	0	\$400.00
Total Additional Income	0	\$188.00
	0	\$188.00
Income	0	\$188.00 \$45.00
Income Extra Costs	•	
Income Extra Costs Treatment	0	\$45.00

The treatment programme involving a progesterone implant and GnRH and prostaglandin hormones is further improved by the addition of eCG hormone when the progesterone implant is removed. It improves pregnancy rates by about a further 7% further increasing return on investment. We had excellent results including this hormone in the programme last year for the first time.

- More time to begin cycling prior to next mating tightening up the following years calving pattern.
- Keeping additional AB bred heifer calves from the heifers speeds up genetic gain by reducing the generation interval

The synchrony programme we have been using in heifers has been giving some excellent results. Some lines of heifers synchronised on our Vetcare Grazing scheme have had 60-70% 1st service conception rates and some even higher.

Over the Fence October 2014 · Issue 21

- Mate to easy calving low birth weight bulls.
- Calve down 2 weeks ahead of the mixed age cows.
- Feed well right from prior to mating right through including the winter to calving until the next mating.
- Well grown heifers, quickly recover

BULL MANAGEMENT

Bulls running with your herd (or heifers) do a remarkable job. They deliver up to 10 doses of semen per day to your cows, and may produce 10 billion sperm per day. That's one for every human on the planet! They generally deliver it to the right cows at the right time, often repeatedly. They keep their heat detection vigil around the clock, seven days a week and willingly lose up to 20% of their bodyweight for the cause.



They are the true sexual athletes!

Mother nature has also been extremely lavish with sperm supply. While it takes only 10-20 million sperm near the cervix to result in fertilisation, the first three ejaculates of the day contain on average 3 billion sperm! That's IOO-fold surplus! But danger lurks later in the day, as the bulls' "love tank" (the epididymis, which drains the testicles, and stores semen ready for the next time) begins to empty. Ninety percent of the days' sperm has gone by the third ejaculate. The diluted semen subsequently produced may be insufficient. It has been estimated the likelihood of fertilisation drops 5% per ejaculate beyond the: third mating for the day.

What does this mean for bull management?

after calving, start cycling early and get back in calf again early.

The evidence overwhelmingly favours two year old calving if you want to maximise profitability in your beef herd. It is not without its problems, but these can largely be resolved or avoided by careful management. The lifetime calf crop from the 2 year old calvers can be expected to be about an extra 0.7 calves compared to the 3 year old first calvers.

1. Safety in numbers

Ensuring top bull performance in most herds starts by matching resources with required workload. A conservative estimate of 30-40 cycling cows or heifers per mature bull and about 25 cycling cows or heifers per yearling bull ensures that the bull's capacity is not outstripped on a big day, where 10% of the cows may come on at once. With the use of known high capacity bulls 50-60 cycling cows per bull is possible but can be risky if a bull(s) gets damaged or sick and becomes infertile. The ratio will suddenly rise too high therefore for practical reasons so we don't recommend a ratio of more than 1:40;

Never use just the one bull in a mob If the one bull you use is a dud, who is going to get them in calf? At least 2 bulls with every mob.

2. Health Management

Pay attention to buying or leasing healthy, well grown, disease free bulls. A vet check of the bulls is a good investment.

- At least get the testicles examined.
- A semen test is good insurance especially if using a high ratio.
- Blood testing for BVD virus antigen is essential to avoid carriers and vaccinate. A BVD carrier can cause havoc in respect to fertility causing early foetal loss, abortion, long returns, late calvers, congenital defects and high empty rates and perhaps the development of PI carriers
- Another virus called IBR virus has recently been shown to affect bull fertility and semen quality so we now recommend that bulls be vaccinated against this virus as well. We are using a vaccine called Hiprabovis that will protect bulls against both BVD and IBR viruses at the same time.
- Be quick to spot lameness. Treat promptly, to minimise downtime and maximize sperm quality. Lameness can be obvious and vets see many nasty cases; however it can have a low grade, chronic impact on bull performance, as the bull is not keen to mount. Avoid bull hoof wear by excluding him from the yard if you are a Dairy Farmer. Rotate bulls frequently, to avoid lameness and speed recovery.
- Sick bulls often have a high temperature which can affect semen quality and perhaps caused lowered or nil fertility. This can have an effect for at least 6 weeks (the length of the semen producing cycle) which effectively rules such bulls out for that breeding season. Its best to replace bulls that have been sick and not take the risk or ensure there is enough bull cover



UDDERING EWES

We have mentioned this important subject before but it's worth repeating. Often a neglected aspect of lamb survival is the effect of existing udder and teat problems mainly from prior mastitis cases. This can have a considerable cost, both in terms of direct financial loss but also an increased workload for the farmer during lambing. A survey done by a Veterinary colleague in Otago found it was not uncommon for farmers who have never uddered their ewes previously to have a cull rate of over 5%. Assuming a scanning of say 170% and a rate of 4-5% of ewes with detected udder faults; that's about 8 lambs/100 ewes or \$640 at risk at \$80/lamb.

Udders should be carried out at least a month after weaning.

Udder and teat conditions that should be culled for include;

 Hard lumps in the udder tissue indicating scarring and possible walled off infection

BLOAT

There have been more deaths from bloat this winter particularly in young stock than we have seen for a long time. Not just on new grasses but on older pastures and crops as well. It seems to be related to the spring like growth we had in the early to mid winter after the drought. A lot of pastures had a higher percentage of clover than usual. Deaths have occurred on shorter, high quality, highly fermentable pasture

What can you do??

Stock usually die 2-4 hrs after being shifted on to a new break. Check 2 hours after shifting to see if bloat is a problem. They blow up on the left side first and only die when blown up on both sides.

Bloat is a function of high quality pasture and rate of intake. Shift stock before they get too hungry. Hungry animals gorge and more likely too blow. Leave some feed behind; at least 1200kgDM/Ha which will have the added benefit of growing more grass. Grass grows more grass which is an added benefit.

Bloat is more likely after bad weather, due to the animals with their backs to the weather and less food intake. When weather improves they are hungry and gorge.

Bloat is more likely when introduced to wet and cold feed especially after a frost. With this in mind perhaps shift stock in the afternoon when the grass is maybe drier and is higher in sugar level due to the effect of sunlight on the pasture. Grazing mature and longer pastures rather than new grass that usually has more clover will reduce bloat.

Feeding eg hay, silage or straw before moving on will avoid gorging and prevent bloat. This is the best option on crops, as animals are usually quite hungry when shifted as their break has turned to mud. Also stock on crops should be getting some hay, silage or pasture in their diet to balance their diet anyway. 100% crop feeding is not recommended and can cause digestive upsets as well.



If you doing all you can do and still getting deaths from bloat, identify the animals

that are blowing up 2-4 hours after being shifted, draft them off and set stock them so they never get hungry.

If remedial measures not working and bloat still a problem then bloat remedies may have to be used. One of the best products is Rumensin Anti Bloat Capsule. The effect of an extended treatment period (100 days) and a vast improvement in growth rate (about 16%) and production if treating milking cows more than pays for the capsule. There are many other anti bloat materials that can be used depending on the situation, including drenching daily, water trough treatment, pasture spraying or in line dispensers.

In an emergency with an animal severely bloated and in distress, first try and run it around. Often this will get rid of some gas. Drench with bloat oil as per label or parrafin oil 500ml. Last resort stab with a sharp knife left hand side, hand breadth back from last rib and hand breadth down from the spine, twist knife to let frothy gas ridden grass out(like a Rotorua geyser) out then call us to stitch it up.

INDUCTIONS TO BE BANNED

Notice has been given that inducing dairy cows to calve early with drugs will be banned from the 2015-2016 calving season and onwards. This means that this year's calving season will be the last at the 4% limit.

For specific circumstances outside a farmer's control that have a direct impact on reproductive performance (e.g. adverse climatic event, disease outbreak) dairy farmers may apply to their respective dairy company, via their Veterinarian, for a short term dispensation to carry out inductions.

Over the Fence October 2014 . Issue 21

- Saggy udders that will result in large droopy udders at birth whereby lambs are unable to suckle
- Burst, healing and gangrenous udders. If relying on shearers these are likely to be the only ones they will detect.
- A cording/firmness in the centre of the teat canal that results in a blocked teat. This lesion is often missed by farmers
- Firm swelling of one side from which pus can be expressed
- **VETCARE TRAINING**

Term three has been a very busy ten weeks for our veterinary nursing students. This term has seen the students progressing from the basics to more the specialised areas of veterinary nursing.

Exciting topics such as Nursing hospitalised patients, Anaesthesia and analgesia, Intra venous drips and fluid therapy, Dispensing drugs and Surgical assistant have been on the timetable.

They have almost completed their "Surgical Rotations", this involves the students being assessed in four different roles supporting the veterinarian and their animal patients in surgery.

A surprise field trip is planned for the last week of term to unwind and debrief before they head out into New Zealand's wider veterinary community to spend a week in another practice. Fun and exciting times ahead!

Term four commences 13th October giving the students seven weeks left to consolidate their learning and get ready to graduate in December.

During the upcoming holiday break we will be conducting interviews for the 2015 class intake. Registrations are still open. Thickened, fleshy udders and cut/missing teats

The survey found that farmers that were uddering their own ewes were often too harsh and were culling perfectly good ewes. Likewise other ewes with subtle problems were missed. With this in mind, we suggest you get one of our Vets to go through some ewes with you as a training exercise. Our suggestion is to go through the ewes first, pull out all likely problem cases, and get us to double check them.

Once you have culled all problem ewes, in subsequent years the cull rate should be down to 0.5-1.5%



GENERATIONAL TRAITS

Trait	Baby Boomer	Generation X	Generation Y
Loyalty to Employer	Work my way to the top	Shortcut to the top	Every weekend off or I quit
Respecting your elders	Automatic	Is only polite	Whatever
Sex	After marriage	Anytime	Online
Change	Resist it	Accept it	Need it
Money	Earn it	ls not everything	Give it to me

What's **Up**



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