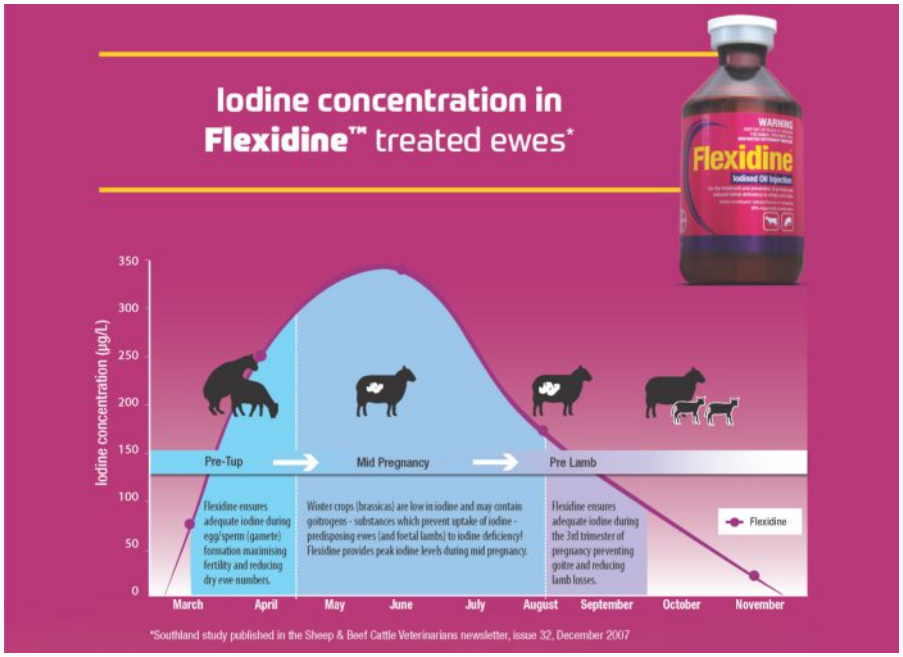
gateway vets

Gateway Gazette

Issue 18 | December 2018

Flexidine

Inject once for more lambs on the ground next year



You might be forgiven for thinking that as a Brit overseas this wet weather might feel quite homely, however, even I am finding it a bit much. Despite this, it was only a few weeks ago that we were worried about potential drought conditions. Our sheep farmers at least, can be grateful that the rain held off as long as it did, with good lambing conditions and early lamb survival. The weather is only one factor which influences lamb survival though, and as lamb prices improve, it becomes more rewarding and profitable to get as many lambs up and going as possible.

Whilst we can't control Mother Nature, we can intervene in other ways to boost lamb survivability. Many ewes in Canterbury should receive iodine as part of their animal health plan. Iodine deficiency is particularly likely in the South Island as it is associated with feeding brassica crops such as kale. Brassicas contain goitrogens which block the uptake of iodine into the thyroid gland.

Why does it matter? Iodine is required to synthesise thyroid hormones involved in energy metabolism and protein synthesis of cells. Thyroid hormones are essential to foetal development of the brain, the lungs, the heart and wool follicles. Adult ewes have a store of iodine in their thyroid so they cope well with periods of time on kale. Meanwhile, lambs developing in the uterus cannot store iodine so are far more vulnerable to subclinical deficiencies in the ewe, particularly during the third trimester.

Clinical signs associated with iodine deficiency include goiter in lambs - enlargement of the thyroid glands under the jaw. Still births are far more common in lambs born to ewes with iodine deficiency. Neonatal mortality has been reported as high as 60% in ewes grazed on kale without supplementation. Premature lambs may be born alive but have little wool or bare skin. Lambs with low thyroid hormones are likely to have impaired lung and brain function leaving them far more vulnerable to cold weather.

Prevention is the best strategy. At Gateway Vets we recommend Flexidine iodine injection annually. This long lasting intramuscular injection provides a deposit of iodine which is slowly released. Timing can be discussed on a farm by farm basis. Generally speaking though, an injection in March would suit those tupping in April and turning ewes onto crop from May onwards. Research suggests boosting iodine levels before conception may improve scanning percentage, however, if you miss this window Flexidine can be given during pregnancy until two months pre lambing to improve lamb survival. Alternative methods of iodine supplementation are on the market but their suitability is much more system dependant. We would be happy to talk about these alternatives with your farm in mind.

There are fewer 'one shot wonder' drugs than we might like in the veterinary field but for iodine deficient ewes and their offspring, Flexidine provides an easy and economic option, resulting in more lambs on the ground and more profit in your pocket.

Amy Edwards

Bull Power

We have stressed the importance of maintaining on-farm Biosecurity to reduce the risk of introducing Mycoplasma bovis. Fully investigating the history of introduced stock including bulls is part of maintaining Biosecurity. Recently we have seen clients purchase bulls for heifers which were low risk but not suitable as breeding bulls. It is important to not only source low risk bulls but to ensure these bulls can do the job!

How many bulls do I need?

- Estimate how many cows are conservatively pregnant based on submission rate and past history. If you estimate your six week calve rate is 70% then there is still 30% of your herd required to concieve.
- So if you have 1000 cows and 70% are in-calf then 300 cows are still empty. A ratio of 1 two year old bull to 30 empty cows is appropriate so ten bulls would be required. The best results are achieved when two bull teams are used and rotated every second or third day, requiring twenty bulls in total for the above herd.

What should I look for?

- Evaluate overall appearance.
- Avoid aggressive bulls. These may injure inexperienced staff and are more likely to scuff claws and become lame.
- Good conditioned bulls without being fat.
- Good legs and claws for walking.

The weight of the bull is an indicator of suitability for mating but it is just a guide. While weight is important for resale an overly fat bull will not be fit and may struggle to be fit enough to cover cows. More important is good conditioned bulls which have suitable frame. The height of the bull should be the same or slightly smaller than the cow. Bulls can manage to mate bigger cows but it is tiring for the bull. We also see more injuries in bulls mating big cows.

What about Yearling Bulls?

This is an option for smaller crossbred herds. Yearling bulls are normally Hereford or Angus and need to have the frame and scrotal circumference outlined above.

Yearlings can be just as effective as two year old bulls but don't expect them to mate as many cows. A ratio of 1:20 should be used. Yearling bulls can be more cost effective than two year old bulls because, although more need to be used, the purchase price is much less. Yearling bulls can be retained for use as a two year old which should reduce Biosecurity risk.

Reproductive organs

- Scrotum circumference is a good indicator of puberty and semen capacity. A minimum circumference of 32 cm should be required. Two testicles are also required!
- Testis should be firm and even in size.
- The penis should be free-moving in the sheath with no deviation or warts.
- The internal sex glands should be of normal consistency and symmetrical.

Fertility Testing

Gateway Vets offer a fertility testing service for bulls. This includes semen testing and a physical examination. Between 5 and 20% of bulls can have sperm quality issues. Bulls with less than 70% normal sperm will have significantly lower conception rate per mating. Contact Gateway Vets for more details.

Animal Health

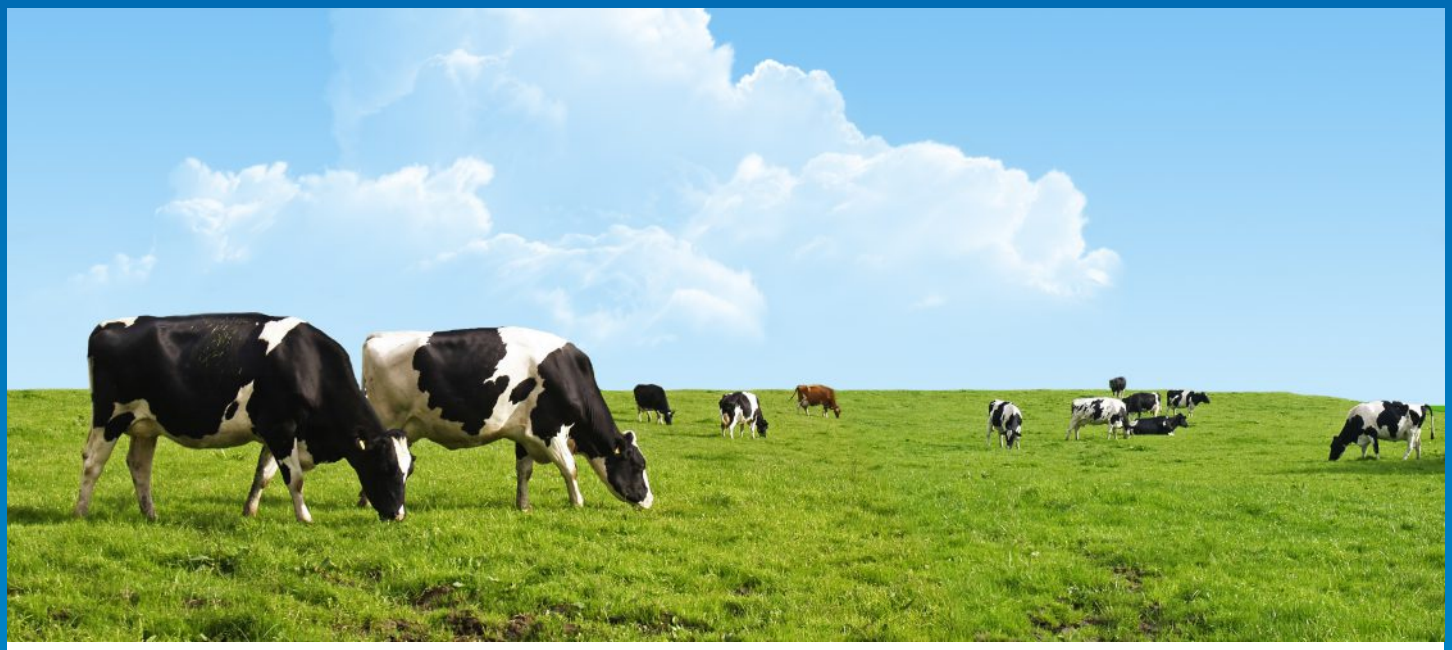
- All Bulls should be blood tested negative for EBL and BVD antigen and accompanied by a veterinary certificate along with the relevant laboratory test results.
- All bulls should be fully vaccinated against BVD. The second vaccination should have been administered three weeks before mating begins. Bulls can be carriers (Persistently Infected) but they also need to be protected against BVD.
- Bulls should be vaccinated against Leptospirosis.
- Ideally Bulls should be vaccinated against Clostridial disease using Covexin(10 in 1). All cattle should be vaccinated against clostridial disease. Bulls are particularly susceptible to clostridial diseases Black Leg and Malignant Oedema because fighting causes muscle damage.
- Lame bulls should be attended promptly. This may require a vet visit to sedate the bull so the claw can be pared. A lame bull will not serve cows effectively but still stop another bull from mating if it is a dominant bull. Bulls also need to be sound at the end of mating to enable transport to take place.
- Lameness commonly results from bulls walking long distances on farm tracks which they are not accustomed to and then entering the yard. Bulls will ride cows in this confined area and scuff claws particularly the toe. Prevent bulls from walking with the cows from the paddock or at least prevent bulls from entering the yard. Rotating bulls will also allow bulls to rest.

Hopefully your bulls will get over 20% of your herd pregnant. Bulls are excellent at detecting heats which may go undetected by tail paints. They are motivated throughout the mating period as long as they are fit for purpose. It is worth attention to detail to get the most out of them.

gateway vets

Philip Skinner BVSc • **Robyn Skinner** BVSc • **Thurz**

Body condition scoring



Body condition scoring is a crucial tool that can be used to assess dairy cows and their energy reserves. Unlike measuring live weight, which can vary greatly depending on breed, age, gut fill and pregnancy status, the body condition score (BCS) looks at the fat coverage of the cow at eight different points to determine whether she is too skinny, too fat or just right.

BCS at calving is a key predictor of cow performance for the next season. Cows that reach the BCS targets below will be in the best position for optimal milk production, early cycling, improved early conception rates and decreasing risk of metabolic disease. Cows under the BCS targets have increased risk of mastitis, metritis and metabolic disease. Their daughters have also been shown to produce less milk and have poorer fertility. Cows that are too fat are also at higher risk of metabolic disease and calving difficulties.

Key BCS targets	
Calving (1st or 2nd calver)	**BCS 5.5**
Calving (mature cows)	**BCS 5.0**

It is difficult to change BCS quickly so mid lactation, late lactation and the dry period are the most important times to help your cows to reach the calving BCS targets. It takes a long time for a low BCS to increase so proactive drafting of cows now based on BCS is crucial to ensure they are at the BCS target for next calving. For example, a mature cow dried off in BCS 3.0 would need 160 days dry on pasture to achieve target calving BCS. A unit change in BCS correlates to approximately 30kg change in live weight. Early intervention now could help this cow (currently at BCS 3.0) be at BCS 4.0 at dry off and only need 100 days dry on pasture (thus saving more days in milk). Cows in poor body condition score now could be drafted into a light herd, can be dropped to once per day milking or dried off early.

Good times to check BCS

Pre-Christmas	Assess BCS gain compared to planned start of mating, make plan for autumn
Mid-February to mid-March	Check plan progress, consider more feed for light cows, milking once a day or early dry off
Pre-calving (springers)	Check how many reached BCS targets. Decide if plan worked or needs a change next year
Planned start of mating	Assess BCS loss from calving to mating

Ways to check BCS

- whole herd average
  - paddock walk and scoring of at least 70 random cows
  - random 70+ animals during milking
- individual animal scores (especially valuable in Autumn to decide early dry off)

Body condition scoring has been proven to be reliable and consistent with a Dairy NZ accredited BCS assessor. Using an external assessor will provide a fresh pair of eyes on the cows you see every day. We can provide this service for you here at Gateway Vets along with a BCS report and plan to help ensure your cows reach their BCS targets at calving.

Carla Fletcher

The Broken-Leg Heifer

Take your mind to an afternoon on the farm. The sun is on your back (or more recently the rain), and you are puttering along on the two-wheeler behind the cows as they meander along to the shed, their full udders swaying with each step. You hear a 'Bang!' and suddenly a perfectly healthy heifer is lame, refusing to put any weight on her front leg. On closer inspection you suspect severe damage or a break and arrange euthanasia of the heifer to relieve suffering.

This is a frustrating scenario and only too real. Nationwide there has been an increase in the number of unexplained front leg fractures in first lactation heifers over the last several years. A phone survey in 2015 showed that in the 2014-2015 milking season roughly 1 in 8 NZ dairy farms experienced this problem. Farms lost 2-3% of heifers on average, with some severely hit farms losing 25% of their heifers. The breaks occur mainly in the first 2-3 months after calving as calcium is mobilised from the bone to fulfil lactation demands. Heifers usually cope with this transient osteoporosis. However, the current theory is that underlying bone weakness from nutritional inadequacies at key stages of development renders the bone unable to cope. Normal forces can then result in fracture. Limeflour supplementation after calving and once a day milking are tools to reduce the demand on heifers and counter mobilisation of calcium from the bone. If you suspect fractures have happened on your farm, then limeflour supplementation is recommended after calving for heifers next season.

The underlying cause is proving difficult to ascertain and research is ongoing. Copper deficiency has been found in approximately 50-60% of cases. Correcting and preventing this deficiency is vital as copper is important for collagen formation and bone strength.

If you have lost heifers on your farm to this broken leg syndrome, whether confirmed or not, I am interested to talk about it and gather any information that might help us to solve this problem together. In the meantime, keep on top of copper supplementation from weaning through to first calving and keep an eye out for any unusual fractures, especially in heifers.

Thurza Dickson

Ph: 03 693 9060 | **Fax.** 03 693 9065 | **Email.** clinic@gatewayvets.co.nz

5 Woodbury Road, R D 21, Geraldine 7991, New Zealand | Open Monday to Friday 8am-5pm, Closed Saturday & Sunday