We will be hosting our annual Spring Seminar on the:
2nd of July.
The topics to be covered include:
• Calving techniques and tips
• Downer cows and metabolic treatments
• Mastitis
• Lameness and Hoof trimming

It is a great opportunity for new staff to be trained up, or old hands to get a refresher course from enthusiastic vets. Lunch and drinks will be provided. Notes will be available to keep.

Cost: $50 (vet club members free - sponsored by the vet club.)

Cambridge Vets are trained up and eager to teach new farm employees the introductory Stock Sense course. This is a half-day teaching session set up by DairyNZ, which means it is free to levy-paying farmers. It covers how to spot and report sick cows and lame cows, and other important practical skills. This course will be run on the 1st of July, and will be restricted to 12-18 people.

Phone the clinic to book in any new workers. Ph 827 7099

Spaces are limited to both the Spring Seminar and the Stock Sense Class, so don’t delay!
The cow undergoes a huge metabolic shift as she calves and comes into lactation. Her demand for energy and minerals shoots up, often faster than the diet and body can allow for.

The classic **Milk Fever** is a deficiency in calcium. As this is required for the functioning of muscles, the cow is often wobbly, or down and unable to get up. She is recumbent, and looks all floppy, often with an S-bend in the neck. Cows are most susceptible to this at the time of calving and for a few days after; by this time the body has normally adapted through increasing the circulating levels of calcium.

**Treatment:** Is the administration of calcium, either in the vein or via an oral drench. Prevention normally consists of supplementing the herd with magnesium from a month before calving, as this is an essential catalyst for the mobilization of calcium. Options include water treatment, pasture-dusting, boluses or drenching (Moremag is a drench that lasts for 10 days).

However, magnesium can be a primary deficiency in the form of **Grass Staggers**. These cows may also be recumbent, but they tend to be twitchy, often with tremors, but care needs to be exercised as their nervous system is excitable and they are prone to charging!

**Treatment:** Is with administration of magnesium under the skin or as an oral drench. Intravenous magnesium may cause heart failure, so caution is advised to say the least. Affected animals may even start convulsing or paddling.

Both Milk Fever and Grass Staggers can be fatal, and the longer the animal is down, the more muscle damage she suffers, and the lower her chances of recovery.

In the spring time, prompt treatment and good nursing are essential.

Cambridge Vets did well in the inaugural Bayer NZ Calving Cup: Julie won the 2004 graduation cup with 67 points, and Peter won the 1999 graduation cup with 60 points.

Vets from all over the country entered their calving information, and it has been collected for analysis – 9900 calvings! The Waikato / BOP had the greatest number of calvings, and for some reason we had the highest % of twisted uterus (9.11%). Head back was the commonest problem, then calf too big for the cow, then leg/s back. 77% of calvings required correction and a pull, 19% required foetotoomies (cutting up) and 5% were caesarians.

The other two components of metabolic issues are **low phosphorous** and **ketosis**.

**Low phosphorous** may complicate milk fever, and the distinguishing feature is that it initiates a haemolytic anaemia leading to redwater (although there are also other causes of red urine).

**Ketosis** is when the cow does not have enough energy for the demands of lactation; the body produces ketones as a short term energy source, but as these levels rise they cause her to become slow and dopy. This can be a big problem for the herd as a sub-clinical picture, leading to reduced milk yield and a gateway to follow-up diseases & reduced fertility. We can check the herd for ketosis about 2 weeks after calving with a cow-side test.

For details on supplementation & treatment, please see our website or one of our vet team.

Pre-lamb clostridial vaccination of ewes is one of the best investments you can make. Clostridial disease such as pulpy kidney, tetanus and navel ill are important diseases of lambs; pulpy kidney in particular will often strike the biggest, healthiest animals in the mob with little or no warning. Often the first indication of an outbreak is dead animals.

Ewes should receive two doses 4-6 weeks apart at a young age followed by an annual booster within 4 weeks of lambing. The pre-lamb booster will trigger production of collostral antibodies giving protection to lambs against clostridial diseases for up to 12 weeks. Lambs born to unvaccinated ewes should be given tetanus antitoxin at tailing. For lambs born to vaccinated ewes this is unnecessary and they can begin a 5 in 1 or for extra protection Ultravac® 6in1 programme.

Lambs should begin their vaccination programme well before maternal protection ends. The administration of an appropriate 5 in 1 / 6 in 1 vaccine at docking with a booster 4-6 weeks later or at weaning will minimise the risk of a potentially lethal protection gap between the decline in maternally derived antibodies and the lamb’s immune response to vaccination. Ultravac® 5 in 1 and 6 in 1 produces effective immunity where maternally derived antibodies are still present, and can be first used at docking or at any age.
Do you have everything you need for Pet Day?
We have lamb covers, feeders, lead ropes, Milk and Colostrum powders and more in store!
Don’t forget to dehorn calves and vaccinate your animals. Ask in clinic for more info!

## Calving gear
- ropes, chains, handles
- Disinfectant, lube, gloves
- Penicillin, oxytocin
- Metabolics - Calcium, Magnesium, Oral treatments
- Ketol, MPG, Starter Drench
- Rumensin
- Mastitis treatment, Intramammary & Injectable
- Bulk Magnesium, Molasses, Calcium, Salt
- Eprinex / Dectomax / Genesis / Drench
- Teatspray and Udder Cream
- Hoof gear

## Calves
- Iodine spray, Electrolytes, tags, feeders
- Shed disinfectant, teats

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**THIS IS THE YEAR FOR CHAMPIONS**

Direct **effective** delivery plus longer acting formula equals supremely conditioned stock.

Buy Dectomax® and receive a FREE* Stoney Creek Recreational Jacket.
Kelvin has put together some early bird deals on these essential spring products. Purchase in July and be into win. See below for details.

**Bomac metabolic products** - If you buy a box of 12, you will get one flexipack free! This includes the entire injectable range. The Bomac flexi pack range is proven and reliable. Get those cows up and milking. We stock the professional range of these products which includes a dose of B12 to boost appetite.

Our recommended treatment for down cows after calving is a bag of the appropriate calcium in the vein followed by an oral dose once the cow can swallow well and is alert. This will help to stop these cow relapsing and keep them eating. Remember that products containing dextrose like Calpromax/Calprophos should only be given in the vein. They are not absorbed well from under the skin.

**Oral calcium products**: We highly recommend the use of oral calcium products in conjunction of under the skin treatments, as long as the cow has a good swallow reflex. Oral calcium products give much more calcium than putting a bag under the skin and it lasts much longer. We find it drastically reduces the number of milk fever cows that relapse. Most of these products have a burst of energy as well. We stock the following proven oral products:

- **Calform Plus** - Rapid acting calcium and a shot of energy that’s easy to pour. The vets choice.
- **Oral Max** - 650ml bottle and 10 litre packs.

**Starter plus 200 litre** Our proven cost effective post calving start up drench. Keep them on their feet and eating through the transition period.

**Drench deals** - We recommend all heifers and cows are drenched at calving. There is good research work using Eprinex, in NZ, to show on average heifers get in-calf 13 days earlier and cows give an extra 8 kg of milk solids during lactation if treated as they calve.

- **Eprinex** - Buy 3 x 5 litre packs and get a 5 litre free of charge.
- **Genesis** - 5.5 litre - Buy two and get one free!
Diarrhoea (scours) is the single most important disease of the newborn calf and is responsible for the greatest economic losses in this age group. Calf scours is a complex disease; the causes of which are well known - nutritional, rotavirus, E.coli, cryptosporidia, salmonella, coccidia, coronavirus.

**Treatment:** The presence or absence of the suckle reflex will primarily determine which route the fluid will be given; orally or intravenously.

Death generally arises when fluids/electrolytes are given too little or too late.

Aim to give 7-10L’s/day divided into 2 litre feeds – that’s 4-5 feeds/day!
This sounds like a lot of fluid (and work) but remember we need to replace fluid lost through ongoing diarrhoea, replace the deficits already incurred and give the calf fluid for daily maintenance requirements.

There are a number of excellent commercially available, carefully balanced electrolyte replacers on the market for treatment of calf scours. Giving straight water does not work. Consult with your veterinarian regarding the appropriate oral electrolyte product for your needs. Milk is also required to provide the calf with an energy source but milk should not be mixed with the electrolytes as this may affect curd formation within the abomasum. Once the suckle reflex has been lost and the calf is down IV fluid therapy is essential.

**Contact your vet immediately for further assistance.**

**Prevention and Control:** Good colostrum management is critical to prevent disease—2L’s of colostrum by bottle or feeder within 12 hours of birth. Prompt identification of sick calves, removal to hospital pens, and administration of effective, vigorous treatment. Establish an isolated ‘hospital’ shed to minimise the spread of disease from infected animals. Care should be taken to prevent the risk of personnel carrying contaminated material from the sick calves to animals in healthy pens. Consider establishing foot baths. Treat & feed the calves in the hospital pen last. Clean (with an effective, safe and appropriate disinfectant), spraying the pens on a weekly basis and/or spell pens between batches of calves. Provide clean, fresh drinking water in drinkers that cannot become contaminated with faeces.

Vaccines are available for some pathogens - discuss with your vet.

Irrespective of the cause of diarrhoea, electrolyte replacement therapy remains the primary treatment of choice. Antibiotics & gut protectants (of which there are many) play a supportive role.

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**Increasing Future Milk Production through Colostrum Intake?**

The importance of feeding newborn calves an adequate volume of high quality colostrum is well recognised both in terms of providing essential nutrients and protective immunoglobulins. An increasing body of work also suggests higher volumes of colostrum can increase future lactational performance.

A 2005 study compared the milking performance of calves fed 2L Vs. 4L of high quality colostrum within the first hour of life. The calves were reared exactly the same from this point onwards and future performance was recorded. The results from the study are summarised below:

- The calves fed 2L’s had higher veterinary costs – primarily because the nature of illnesses in calves fed 2L of colostrum required expensive treatments and monitoring. Septicemia (blood poisoning) was a common occurrence among these calves, an indication that they failed to absorb adequate levels of protective antibodies
- Animals fed 4L’s grew at a faster rate than their 2L counterparts with average daily gains differing by as much as 0.23kg/day
- The number of animals fed 2L of colostrum at birth that failed to complete 2 lactations was 24.3% compared with only 12.9% fed 4L of colostrum
- Milk production in the first lactation was similar for each subset
- Milk production in the second lactation was significantly greater in the animals fed 4L of colostrum
- 4L animals produced on average 75 kgMS more than 2L animals. At a modest $5 payout that equates to an additional $375/animal

I think the results justify encouraging colostrum intake in our future replacement calves as a standard management practice.

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**Theileria Update**

- There has been a decline in cases for this summer from the spring peak (as per normal seasonal trends), and less than in the previous year.
- Most cases have occurred in the Waikato region
- Relatively few cases have occurred in regions in the bottom half of the North Island
- There is no evidence that there is an undetected propagating epidemic occurring in the South Island regions.
**Welfare Seminar**

Cambridge Vets teamed up with DairyNZ to present a “Welfare Matters” seminar in April. Thanks to Shoof for a great venue! It was a good opportunity to discuss the welfare requirements in our industry and our reputation to markets, and to practice making some simple farm policies. Take home points:

- Higher welfare benefits the business and the industry as well as the animal!
- Euthanasia by blunt force trauma is no longer allowed
- Captive bolt does not require a firearms license, but training is still needed for its correct use, and sometimes a secondary method is necessary
- A moving vehicle must not be used for traction to assist calving
- There are guidelines as to animals being Fit for Transport (e.g. not lame, BCS 3.0+)
- Calves need to be healthy and able to stand for transport; even bobby calves are a life worth living
- Talk to your staff to engage them and foster a welfare positive environment. Farm policies can be easy to work out as a team.
- The welfare codes can be found at [www.biosecurity.govt.nz/animal-welfare/codes/dairy-cattle](http://www.biosecurity.govt.nz/animal-welfare/codes/dairy-cattle)
- Humane slaughter guidelines available from

**Other upcoming seminars:**

We will be organizing a Mating / Infovet evening in Sept – keep an eye open!

**GOSSIP!** It’s official! Christina our telephonist, tied the knot with John to become Mrs Gerrand on the 28th of March. We wish them every happiness in their future together.

Sara Lee has rejoined our small animal team, after spending about 5 years away, growing a family and enjoying her OE in England. Her main interest is pathology, and we are lucky to have someone who is a Member of the Australian College of Veterinary Scientists. In addition to her 3 boys, she also has a foxy and an old cat! You can see Sara in the clinic on Mondays, Wednesdays and Fridays.

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**Infovet Mastitis Summary for season 2014**

The graph above shows the season average BTSCC for our Infovet clients. The average was 170. We can see the number of SCC grades with the yellow marker relating to the number on the right axis. How does your farm rate in comparison? If you’re struggling with mastitis or cell count, we have accredited vets happy to help; just call us.

Of course, the other grades we get involved with are **Inhibitory Substances**. Just a few reminders to avoid this frustrating and costly outcome:

- MRST – make sure all animals on a with-holding are Marked, Recorded and run Separately, before being Treated.
- If cows calve before their Dry Cow WithHolding period is complete, we can get the milk tested; don’t just put them in the vat!
- If you have several animals returning to the vat after a treatment (or on the edge of the DCT WHP), stagger them in rather than putting them in all on one day
- Test buckets are a risk – better to milk them last and divert the milk line out of the vat
- Ensure the plant is washed and checked appropriately
- Ensure teat spray is mixed at the correct ratio.

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**Imrestor**

The first and only proven Immune Restorative Agent, effective against a broad range of organisms. Cows have a period around calving when their ability to fight infection drops off. This injection is a cytokine (messenger protein) that restores the function and increases the number of neutrophils during the period around calving when the cow needs it most.

NZ studies with over 1300 cows in the Waikato, Canterbury and Southland showed a 22% reduction in clinical mastitis in the first 30 days in milk. We anticipate it would be used to reduce the hassle and frustration of handling sick animals if there is a known risk of mastitis (such as heifers historically coming in with mastitis); or if there is an unexpected mastitis issue at calving, the cows yet to calve could be targeted. Treatment involves 2 injections; approx. 7 days pre-calving, and within 24h of calving.