



NSVS LTD

VetTIMES

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Pet Reminders

- **Vaccinate pets prior to boarding at kennels**
- **Get pets xmas presents**
- **Check for barley grass**
- **Worm cats and dogs**

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December 2008

Situation Comment

November has been a strange month, hot one minute, snowing the next. The world is in a financial melt down which has meant a drop in the dollar, fuel prices, fertilizer prices and interest rates. Hopefully that is as bad as it gets.

The snow was fortunately short lived and has been followed by some much needed rain. Pasture covers are looking good in most areas.

Most farms have had reasonable tailing percentages after scanning was back a bit, reflecting a mild

Spring. Venison continues to repay those who stuck with deer through the last few years despite easing in the last 10 days.

Dairy mating seems to be picking up after a steady start and the current pasture cover will hopefully see milk yields remain high.

Staff News

Congratulations to Morgan and Liz on the birth of their lovely twin girls Eilish and Clodagh. They may have arrived a little early but are doing really well. Rochelle and Morgan have completed the InCalf advisor training courses run by Dairy NZ for rural professionals. They can help and assist any dairy farmers requiring more information about their Fertility Focus and reports. Jill and Nigel have again been down to Riversdale to help out with the mating season. Jenny also spent a week in Te Anau working from there. Our annual Christmas shout will be at the Bal-four Races On the 11th January. All members are invited. We would like to wish you all a happy and peaceful Christmas and New Year.



Eilish and Clodagh Greene
Age 6 weeks

Sheep Performance Programme

Abortion Reminder

Intervet/Shering-Plough has developed a Sheep Performance Programme to help to increase lamb numbers. The focus is on abortions and early embryo losses. They have produced a 'Potential Earnings' calculator to demonstrate potential risks of non-vaccination as well as the corresponding gains of vaccination. This is a quick and simple tool available for your use at our front desk. You may remember last year in conjunction with Intervet, we offered FREE lab testing to assess the Campylobacter and Toxoplasmosis status on your farm (Flock Check). This is valuable information to have on your farm. This programme is still available. You may wish to take advantage of this offer particularly if your scanning or lambing percentage was lower than expected this year, or indeed lower than you would like for next year. Blood is taken from ten wet ewes and ten dry ewes for testing. A full report is then provided with explanations and recommendations for future management. Please pop in to check out the 'Potential Earnings Calculator' and enquire about the 'Flock Check' blood tests.

Hypothyroidism

Low thyroid hormone levels

Case 1

- 7 year old female huntaway. Has areas of symmetrical hair loss on her rump. She does not scratch at this area and there is no inflammation.

Case 2

- 9 year old male eye dog. Has weepy sores all over his body which he has had for months. These have not responded to any treatment.

Case 3

- 12 year old male huntaway in very poor condition with a bad case of dermatitis which has not responded to treatment.

All of these dogs were found to have low levels of thyroid hormone. This is easily treated with daily supplementation and improvements are usually noticed in dogs within 4-6 weeks.

How does it happen

The most common form (primary hypothyroidism) results from direct problems with the thyroid gland (inflammation, atrophy, cancer, hyperplasia [unusual increase in number of cells]). Hypothyroidism can also occur with non-thyroidal illness which can suppress the levels of circulating thyroid hormones (euthyroid).

Signs to watch out for

- | | |
|-----------------------------|-------------------|
| - Pyoderma (skin infection) | - Puppy hair coat |
| - Weight gain | - Ear infections |
| - Alopecia (hair loss) | - Infertility |
| - Dry scaly skin | - Inactivity |
| - Lethargy | |

What is thyroid hormone needed for

- Influences many enzymes and proteins
- Metabolism
- Foetal development
- Contraction of the heart
- Necessary for the drive to breathe
- Stimulates red blood cell production and bone turnover
- Increases mental alertness

Treatment

Lifelong treatment is required but is cheap (~ \$5- \$10 per month for a daily treatment). Prognosis in adult dogs is excellent.
J McKerchar BVSc BSc



Rochelle Smith judging the calves at Riversdale Pet Day.



"My client is suing you for growing the straw that broke her back."

Body Condition Scoring Cows

You are only cheating yourself

It has been brought to my attention that some farmers are cheating on their body condition scoring! It seems we all know what BCS we would like our cows to be and what they should be and so we presume that our average cow is near to this score. It helps us sleep at night but we are only cheating ourselves if we are overestimating our BCS. So here are some key pointers.

Some facts:

Target BCS at calving – 5 for mature cows, 5.5 for first and second calvers

Target BCS at dry off – 5.0

Less BCS = less milk and more reproductive issues. A cow calving at less than BCS 4.0 will take 10 days longer to start cycling compared to a cow calving at BCS 5.0

A BCS > 6.0 = more calving problems, and metabolic diseases, and any further gain is inefficient use of feed.

Some pointers:

Ribs – If you can see notches between the short ribs, or they are sharp she is NOT up to a 4

Backbone – If the back bone is risen, with visible notches, not smooth she is NOT up to a 5

Tail head – (the angles formed between the pin bones meeting under the tail)

Deep V shaped = BCS 3's, Shallow U shaped = BCS 4's, No groove = BCS 6.0+

	3.0	4.0	5.0
Backbone	Notches easily seen	Notches visible	Smooth
Ribs	Easily seen, short ribs sharp	Rounded but easily felt	Rounded, not visible
Pins	'tap handle' shape Or 'peace symbol' from behind, pointy	'triangle' shape, rounded edges	Rounded
Tail head	Deep V	Shallow U	Even cover no sharp edges

R Smith BVSc



Deer Reminders:

- **Fawning**
- **De-velvetting—2year olds**
- **Copper as required**

Scanning Information

One of the major improvements made to reproductive management over the last few years has been the advent of early pregnancy diagnosis using ultrasound scanning techniques. Advances in technology and skills now means that early season pregnancy testing is both fast and accurate.

Scanning can be used essentially for three main reasons;

To find cows pregnant to AB-

This is straightforward-scan the herd at least 6 weeks from when AB stopped. Eg. If AB stopped on 1st of December scan about the 12th of January-Cows which are not detectably pregnant at this time will either be in calf to the bull or will be empty.

One of the major benefits of early scanning is the indication that pregnancy rates to AB may be lower than anticipated. In these cases a management decision can be made to leave the bulls running with the cows for 2-3 weeks longer than usual and hence to have more late calving cows or more inductions. In most circumstances it is better to have more late calving cows than to have a higher empty rate.

To find late calving cows/inductions-

Work out the date when you want everything calved by, e.g., 1st October. That means that all cows in calf before the 22nd of December will be calved before this cut off date. Therefore, if we scan 6 weeks later, cows at least 6 weeks pregnant will calve in the time frame we require them to. Cows less than 6 weeks pregnant would be calving after the 1st of October-these cows would therefore possibly be inductions. An additional benefit of finding late calving cows is the more efficient grazing management of pasture-late calving cows can be held off the milking platform and can be fed differently over winter. (They would thus be more likely to meet the condition score requirements for induction cows of between 4.5 & 6.5).

To find empty cows-

The later this scan the better, as with most 'normal' pregnancies there is a chance that the pregnancy will not go full term (due to embryonic loss or abortion). Therefore, if all you want to do with scanning is to find your empty cows, the testing is best done later in the season.

Scanning can also be used to age pregnancies up to 14 weeks gestation. However variations in individual animal size mean that scanning is less accurate beyond this date.

We recommend rescanning all cows as a way of detecting any slips that have occurred in natural calving cows. The cost of scanning these animals a second time is recouped by not needing to winter feed empty cows.

As a result of the "Code of Practice for Routine Induction of Dairy Cows" it remains vital that farmers have accurate pregnancy testing data before contemplating inducing any cows-cows can only be induced if they are between 6 and 12 weeks from their predicted calving date, provided they fit all other criteria. Due to this legislation we are only able to induce cows from herds which have this accurate pregnancy testing data on hand. Furthermore farms need to have evidence of the existence of a plan to manage and minimise inductions-early scanning and identification will go a long way towards this. In addition it is highly probable that Spring 2009 is the last season that inductions for management reasons will be allowed as the "Code" is to be reviewed by June 2010.

Now is the time to contact us at the clinic to sort out scanning for the coming season, to determine the best times to pregnancy test your herd to achieve the specific outcomes which are most relevant to you. Remember we have fixed, and back pack scanners, and can scan in rotary sheds, herringbones and up races.

InCalf Project

About In Calf

InCalf is DairyNZ's response to addressing a clearly identified need of dairy farmers - to turn around the unfavourable trend in herd reproductive performance observed over the last 15 years.

InCalf is a learning package of tools, resources and training for both dairy farmers and their advisers. It was developed for Australian dairy farmers, but has undergone extensive revision for New Zealand conditions. It is made available to New Zealand dairy farmers thanks to an agreement between DairyNZ and Dairy Australia.

InCalf started rolling out autumn 2008 in New Zealand. If you are frustrated with a non-cycling problem, finding it hard to get cows back in calf and ending up with too many empties, then you will benefit from being involved with InCalf.

InCalf adviser involvement

Herd fertility is complex, requiring a range of expertise to better diagnose areas to improve, and to implement chosen management options.

The InCalf challenge to dairy farmers is to better involve advisers in your continuous improvement process, and to better align their efforts towards your goals for herd fertility. This will help them deliver real value in terms of measured performance improvement.

InCalf's integrated approach

Farmers will get the most out of InCalf through an integrated approach, combining their Fertility Focus reports with access to knowledge in the InCalf Book and support from InCalf trained advisers working with various InCalf tools.

Both Rochelle and Morgan are trained InCalf advisors and are able to assist in this project. Talk to us about this.

Morgan Greene MVB MRCVS

Castration and Dehorning Calves

Cattle Reminders

- **Dairy calves -copper**
- **Dairy calves -worm control**
- **Bulls -watch for unsoundness**
- **Cows monitor SR and NRR**
- **Pregnancy testing**
- **Check lame cows**
- **Rotate breeding bulls**
- **Arrange winter grazing**
- **Bull Power**
- **Lepto vaccinate calves**

On 23rd December 2005 Parliament enacted legislation making it illegal to dehorn calves over nine months of age without pain relief. The same legislation (the code of welfare act) prohibits castration by any means without pain relief after six months of age. Castration without pain relief using high tension bands at any age is prohibited. Pain relief entails the administration of local anesthetic, by a veterinarian.

The legislation stipulates that these procedures should be carried out when animals are as young as possible.

For spring born calves (August – October) this means castration must be performed before February, (April for October calves). Dehorning should be performed before May.

The pain from these procedures will affect feed intake for a few days even in young calves.

When you are dehorning or castrating calves hygiene is of utmost importance. Infection of castration wounds is not uncommon. A clean bucket of water and disinfectant and sharp tools keeps the wound clean

and makes the job easier.

After dehorning and castration, wounds can become flyblown, another reason to do the job earlier. Calves are also susceptible to tetanus and blackleg so vaccinating with 5 in 1 (or covexin 10) at least two weeks before marking is an effective and cheap way of protecting stock..

M Baer BVSc

Will I Live to be 80

I recently picked a new primary care doctor. I said “No, my former doctor said that all red meat is very unhealthy.” After two visits and exhaustive tests, he said I was doing ‘fairly well’ for my age.

A little concerned about that comment, I couldn’t resist asking him, “Do you think I’ll live to be 80?”

He asked “Do you smoke tobacco, or drink beer or wine?”

“Oh no,” I replied. “I’m not doing drugs either!”

Then he asked, “Do you eat rib-eye steaks and barbecued ribs?”

“Do you spend a lot of time in the sun, like playing golf, sailing, hiking, or bicycling?”

“No, I don’t.” I said.

He asked, “Do you gamble, drive fast cars, or have a lot of sex?”

“No.” I said.

He looked at me and then said,...

“Then why do you really care?”



Horse Reminders

- **Keep bot eggs off legs**
- **Hoof care**
- **Worming treatment for foals**
- **Check condition of brood mares**

Insulin Producing Tumor

Jess a 10 year old female heading dog was the lambing dog. However over the last few weeks she had not been responding as well as usual to commands. Her owners described her as having 'funny' turns, weakness, seizures and impaired sight.

While on farm I had the chance to observe Jess first hand. Sure enough after exercising for only 5-10mins, Jess started to stumble and look disorientated. It was like she had run out of energy. Jess was taken back to the clinic. Physical examination was normal. A blood sample was obtained and her blood glucose (sugar) levels were tested – sure enough they were very low despite having been fed the night before. This started to explain some of the behaviour Jess was exhibiting. Food was immediately offered to Jess to alleviate symptoms. Further testing revealed Jess had excessively high insulin levels.

Insulin normally suppresses the liver from breaking down fat (energy) stores into glucose. When the body has high insulin levels very few fat stores are broken down which results in little or no available glucose. We saw this in Jess with the low blood glucose levels (hypoglycaemia). When Jess started to exercise she had higher demand for glucose by her muscles but when no more glucose was available she started to stumble because her muscle couldn't function properly. We would be feeling very light headed and faint.

Insulin is produced in the pancreas, which sits high up in the abdomen with one lobe lying next to the stomach and the second lobe lying along the start of the small intestine. The pancreas has 2 main functions

1. produce digestive enzymes to break down fats in the intestine
2. produce insulin to help regulate blood glucose levels

In this case the excessive insulin production was due to a growth or tumour in the pancreas. That is to say there was an abnormal accumulation of insulin producing cells which were out with normal control mechanisms within the body.

There are no specific breeds predisposed to this condition but it is often middle aged to older dogs that are presented with it. Often dogs have symptoms for 1 to 6 months before being presented to a vet.

Surgical exploration is generally the best option to try and remove the tumour. This is not taken lightly because the pancreas is not an easy organ to operate on and only the diseased area is to be removed. Often the tumour has spread to form more than one nodule in the pancreas or even to other organs thus increasing the surgical risk or making it inoperable.

In this case, Jess's owners felt her symptoms were increasing rapidly and they felt it was not fair to put her through an involved surgical procedure at her age. As her symptoms deteriorated it was elected to euthanase Jess.

J Sloan BVMS MRCVS

Strangles

Streptococcus equi

The recent outbreak of strangles in the horse industry in New Zealand has been a concern to all horse owners, especially because of outbreaks so close and a large number of horses travelling to and from Canterbury through either racing or other equestrian sports.

Strangles is a bacterial disease caused by Streptococcus equi. Donkeys and mules are also susceptible to this disease. It is highly infectious and can pass from horse to horse through close nasal contact as well as infected material being spread on feed buckets, tack, gumboots etc.

The incubation period is 3-14 days meaning that the horse will start showing signs 3-14 days after being infected and can start spreading it to other horses during this time.

The signs of strangles are fever, nasal discharge and enlargement of lymph nodes, seen as a swelling under the jaw. The horse can become depressed and go off its food. A soft cough early in the disease process is common due to the swelling around the throat. The swollen lymph nodes will eventually abscess and burst after about 7-14 days, which can be quite alarming to owners. Occasionally the bacteria may spread through the blood causing a septicaemia and locate in different areas of the body and create abscesses there. When it does this it is referred to as bastard strangles and abscesses can occur in the lung, brain, liver, spleen and kidneys. This type of strangles is very difficult to treat and fatalities can occur.

If you suspect your horse has strangles, arrange a visit by the vet as it is important to diagnose the disease properly and make sure proper precautions are taken to ensure minimal spread of the disease. The best way to confirm the disease is to take a sample of pus from the abscessed lymph nodes or a sample from the nasal discharge.

If your horse has suspected strangles, it will need to be isolated immediately. Minimise the amount of people who have access to the horse and ensure hands are washed and overalls are removed when leaving the infected horse. All buckets, gear etc that the horse has had contact with should be disinfected before being used by other horses.

Treatment of strangles involves a course of penicillin given intramuscularly. Penicillin is the drug of choice for Strep. equi infections. Abscessed lymph nodes should be lanced, drained and flushed.

Prevention of strangles is possible and is highly recommended for horses travelling.

There are two options with vaccination. The intranasal vaccine involves two administrations 2-3 weeks apart with annual boosters. The intramuscular vaccine course consists of three injections two weeks apart.

This disease is highly contagious and can pass from farm to farm very rapidly. If you are introducing new horses to your property that haven't been vaccinated they should undergo a strict quarantine for two weeks. When you suspect strangles, call a vet immediately.

M Reidie BVSc

Faecal Egg Count Reduction Testing

In May 2005 Meat & Wool New Zealand and MAF Sustainable Farming Fund initiated the development of the national worm management strategy involving all stakeholders. The New Zealand Veterinary Association has agreed to join these groups to lead the implementation of the Wormwise Strategy. A survey in 2005 showed that only one third of the farms tested had no evidence of drench resistance. Key findings in the survey were:

- 1) 41% of farms had resistance to benzimidazole
- 2) 25% of farms showed resistance to ivermectin
- 3) 24% of farms showed resistance to levamisole
- 4) 8% of farms showed resistance to each of benzimidazole, ivermectin and levamisole drenches
- 5) given as a combination levamisole and benzimidazole drench were effective on 92% of farms.

The question is what should you do now? You should test your drenches to be sure the drench you are using is effective. You should certainly do this by at least doing a post drenching faecal egg count 7-10 days after drenching to check the drench has removed all the adult egg laying worms. Or more ideally, do a faecal egg count reduction test.

To this end we have some help from The Wormwise Implementation group in that we have been allocated funds to half subsidise faecal egg count reduction tests (FECRTs) on weaned lambs on 12 different sheep farms in our area that have not previously used FECRTs. The protocol for starting a FECRT is that approximately 105 weaned lambs would have to be left undrenched allowing us to have 7 groups of 15 lambs for 7 different drenches or combination of drenches to be trialled. Ideally the faecal egg count (FECs) in these trial lambs would have to reach a preferred starting level of 700-800 eggs per gram (epg). An epg of less than 500 would not allow a high level of confidence in the FECRTs. If you are interested in doing a faecal egg count reduction test (FECRT) contact the clinic. These tests would likely to be done sometime between weaning and May 2009 depending on when your undrenched lambs reach the preferred 700 epg threshold.

P A Langford BVSc

Sheep Reminders

- **FEC lambs-drench check test**
- **Flystrike prevention**
- **Wean lambs**
- **Have FECRT carried out on lambs**
- **Palpate ewes udders-cull hard or lumpy udders**
- **Check rams**
- **Vaccinate lambs pulpy kidney**
- **Vaccinate rams footrot**
- **Vasectomise rams**
- **Monitor lamb growth rates**



Feeding Summer Brassicas

Summer turnips are a good way of increasing the productivity of the older paddocks during what can be a difficult time of year. By working a summer crop into the regrassing plan the time the paddock is out of the rotation is minimalised. Brassicas provide high yielding, high quality feed. The crops are moisture sensitive and yields can be down in the dry seasons when the crop is most needed. Due to the high digestibility of the carbohydrates, crops need to be introduced slowly to prevent acidosis and adequate fibre needs to be supplied. Crops allow the rotation to be extended and increase the overall quality of the diet.

The profitability of growing a summer crop is dependant on the yield of the crop, effective utilisation and the cost of the other supplements. The loss of the paddock from the rotation for the growing period of the crop needs to be planned for and managed so as not to result in a feed shortage.

M Baer BVSc

Copper Supplementation in Deer

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Copper is a vital trace element to deer health and production, being essential for many different processes in the body. Clinically, deficiencies manifest in a variety of different ways, the most severe being as swayback in young deer. A high incidence of joint injury or leg breakage may also be noticed in severe cases and classically changes to the colour of the coat are easy to notice.

Most commonly, though, copper deficiencies are 'subclinical' and usually form but one part of a complex of problems which see their collective origins in wider management. Signs, too, are non-specific and relate to depression of growth and reproduction – both very complex processes. Weaner growth may be falling behind target, reproductive performance may just not be what it 'should be', or animals come out of the winter responding 'slowly' to pasture growth and it may be difficult to put your finger on exactly what is the primary problem. In such cases, copper status should be evaluated as an important part of a wider examination of possible causes – such as nutritional issues, other element imbalances, worm management issues and possibly Johnes disease. Many copper deficiencies are actually 'secondary' to such other problems.

A large number of factors influence copper status in deer. The demands of the animal are obviously important – in-fawn hinds having the largest demands over the late winter/early spring period in the last trimester of pregnancy. This period corresponds to the time when pasture copper availability is also at its lowest. Because the foetus is a particularly strong magnet for copper, young deer are usually born with very high copper reserves and even in the absence of copper from any other source, reserves from birth may be adequate for up to 120 days. Efficiency of absorption of copper from milk is also very high. The implication: get the copper status of in-fawn hinds right, and copper deficiency is very unlikely to be a primary issue in their offspring until weaning age.

Types of soils and types of forage are important predictors of likely ongoing copper deficiencies. The most seriously deficient soils are those of coarse-textured nature, formed from acid volcanic and sedimentary rocks, soils formed on marine and littoral calcerous deposits, and soils such as peats and mucks with high organic content. Plants generally do not develop low copper levels when growing on soils derived from basic volcanic rocks. Plants themselves also vary tremendously in their ability to assimilate copper - white clover/ryegrass swards, for example, provide much less copper than does chicory. In copper-sufficient soils, copper concentration is greatest in new leaves.

Therefore mowing, grazing, and the use of N fertilizers will ameliorate the decline of copper in pasture plants. On copper deficient soils however, copper concentrations may be highest in older leaves. Soils high in molybdenum, sulphur and iron can also impair copper uptake, as can large amounts of consumption of soil itself as seen when animals are on crop.

The implication of such complexity is that annual copper status evaluation should be performed, even in cases where copper status has long been considered as satisfactory.

The two objective ways to monitor copper levels in deer are to measure copper concentrations in the blood and in the liver. There is ongoing debate about the number of animals that need to be sampled in order to get a good idea of herd copper levels. As a balance between cost and the representativeness of information gained, five animals are an absolute minimum number and these should be from better conditioned animals. Liver samples - derived from biopsy or from the works - are the best because only liver levels allow prediction of how sustained copper levels will be into times of need. Timing of liver sampling for copper determination is also very important. Low liver levels in hinds/ weaners at slaughter in March/April indicates seriously low status on farm, given that levels are lowest late winter/early spring rather than in autumn. Values in the adequate reference range at this time give no assurance that levels will be sustained and repetition in July/August is strongly indicated. Optigrow laboratory tests performed on the livers of cull hinds provide an opportune time to measure liver copper status in time to respond to any deficiencies found.

Copper can be supplemented in one of three ways. Copper topdressing of pasture at the rate of 12 kg Cu sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)/ha, equivalent to 3 kg elemental Copper/ha, applied in March to increase pasture Copper concentrations to at least 45 mg Copper/kg DM, followed by grazing 4 weeks later, has been shown to be effective in maintaining serum and liver Copper concentrations of weaners for at least 10 months, of hinds throughout gestation and lactation and of fawns to weaning. Copper oxide wire particle rumen bullets are the safest way to give a 'bolus' of copper to deer, and these should not be given more frequently than annually unless on specific veterinary advice. Rumen bullets can also reasonably safely be given at the time of velvetting to stags and are probably the safest form of supplementation to be giving to very thin, copper deficient animals. It is inadvisable to give copper bullets to animals that have been reversed after being fully sedated for velvetting.

Injectable copper supplementation is one of the most convenient forms of supplementation. The edetate based preparations are safer than the glycinate-based ones and result in less severe injection site reactions but they do cost more. Copper injections should not be given more often than every 6 months without testing. No other injections should be given concurrently with copper injections. Recent research has shown that in some instances where copper status of deer is in the adequate range, a growth rate reduction or loss of body weight may occur following injectable supplementation. This is from liver damage that may be caused. The implication is that copper supplementation should NOT be administered when the copper status of the deer is unknown or is adequate.

The frequency of supplementation will depend on herd copper status, dietary factors, production goals and nutritional management and being so situation-specific, we would invite you to discuss your particular needs with one of our veterinarians.

N Dougherty BVSc MRCVS