



# VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

DECEMBER 2015  
JANUARY 2016



## Holiday hours

	FDG	AWA	TAU
Mon 21 Dec	8 - 6	8 - 5	8 - 5
Tue 22 Dec	8 - 6	8 - 5	8 - 5
Wed 23 Dec	8 - 7	8 - 5	8 - 5
Thu 24 Dec	8 - 5	8 - 5	8 - 5
Fri 25 Dec	Closed	Closed	Closed
Sat 26 Dec	Closed	Closed	Closed
Sun 27 Dec	9 - 1	Closed	Closed
Mon 28 Dec	Closed	Closed	Closed
Tue 29 Dec	8 - 6	8 - 5	8 - 5
Wed 30 Dec	8 - 6	8 - 5	8 - 5
Thu 31 Dec	8 - 5	8 - 5	8 - 5
Fri 01 Jan	Closed	Closed	Closed
Sat 02 Jan	Closed	Closed	Closed
Sun 03 Jan	9 - 1	Closed	Closed
Mon 04 Jan	Closed	Closed	Closed

Normal hours resume on Tuesday 5 January 2016

**Please note we have a 24-hour emergency service if required:**

**Feilding 06 323 6161  
Awapuni 06 356 5011  
Taurarunui 07 895 8899**

## Phillips Search and Rescue Trust

**Chris Carter**

The Phillips Search and Rescue Trust operates six rescue helicopters throughout the Central North Island. These include the Palmerston North (PN) and the Waikato Westpac Rescue Helicopters that cover our service areas.

With well over 40% of the PN Rescue Helicopter work being in the rural environment, Totally Vets is proud to be one of a number of regional sponsors for this service. Over 250 missions are flown each year with the community contributing around 50% of the helicopter's funding.

When time is critical, the sight of this rescue helicopter appearing in response to an emergency 111 call must be incredibly reassuring. Their rapid arrival brings life-

saving equipment, rescue personnel and trauma-trained medics directly to the patient. A rescue flight to Dannevirke or Waituna West would take around 12 minutes from its base at PN hospital.

Earlier this year the PN Rescue Helicopter was upgraded from the single engine AS350 Squirrel to a twin engine BK117 giving greater capability and functionality. This machine has increased night time capability, has a larger cabin space for improved patient care, and has a larger rescue hoist to allow two-person lifting with an extra long cable. All of these features allow this machine to assist more people in more remote and difficult to reach locations both over land and over water.

In the words of Chris Moody, The PN Rescue Helicopter's Base Manager and pilot, "This machine sets a new standard for VFR helicopters in New Zealand. What we do, we do together. Thank you to the community for supporting this vital service".

**If you are interested in finding out more about the Phillips Search and Rescue Trust Helicopters, and/or would like to donate to this vital service, please refer to their website [www.rescue.org.nz](http://www.rescue.org.nz) or telephone 0800 11 1010 for further information.**



# Looking ahead

Potential animal health issues, tasks to consider and reminders for December and January:

## Dairy

- Book in for **early pregnancy scanning** - ideally six weeks after end of AI - **article P5**.
- January can often be dry, so avoid taking your residuals too low - **article P3**.

- Continue with excellent **weaner management** - drench regularly, weigh to monitor growth rates, potential trace mineral supplementation, ensure adequate nutrition.
- **Clinical mastitis** - monitor cows and be aware of rising bulk milk somatic cell count particularly if using relief milkers over the holiday period.
- **Lameness** - may become an issue as ground hardens so monitor cows daily and attend to any race maintenance required.

# HA HA



# Facial eczema

Sarah Clarke

Facial eczema (FE) is a disease caused by a mycotoxin, sporidesmin, that is produced by fungal spores (of *Pithomyces chartarum*) that are produced in dead plant material at the base of pasture when it is warm and wet.

Apart from horses, all stock eating pasture are at risk. Sporidesmin damages the bile ducts in the liver and affect its ability to function. The time frame from ingestion to appearance of clinical signs is around 10 to 14 days. The result is photosensitivity of the skin, significant losses in milk production, and effects on reproduction, body condition, and growth rates. Sheep tend to have swelling of the face and drooping ears, whilst cattle have thickened skin, particularly the white haired pink skinned areas. This damage to skin looks similar to really bad sunburn and skin layers may crust and peel off which then risks secondary infection.

The best way to estimate and predict the FE risk is by counting spore levels under a microscope. Ideally this is done at an individual farm level, even down to individual paddocks, with counts above 25,000 considered dangerous. In some regions there is spore count information available from



monitor farms. In the Manawatu Totally Vets publishes, throughout the risk period, spore count results on [www.totallyvets.co.nz](http://www.totallyvets.co.nz) and emails weekly counts to those signed up to their email list.

Zinc dosing of animals, at roughly two weeks before the expected challenge, is a proven preventative treatment for FE. Please note, **it is not a cure**, and needs to be administered **before** spore counts rise in order to be effective - prevention is key! There are numerous treatment options, the choice of which one(s) to use will vary depending on stock class, number of animals, facilities/equipment available, property type etc. Options to consider are:

1. Oral bolus with slow release zinc
2. Zinc sulphate in drinking water
3. Zinc oxide via feed or drenching
4. Grazing management and use of crops
5. Pasture fungicide spray

**For guidance on when to start zinc, which products to use, when to start spore counting and/or for further information give your nearest clinic a call.**

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- **Pink eye** - monitor for early signs of discharge from, or white spots on, eye(s) particularly if hot dry dusty weather.
- **Facial excema** - weather depending, plan to start preventative zinc treatment towards the end of January - **article P2**.

## Sheep and Beef

- **Weaning management** - monitor ewe body condition and check udders, parasite control and vitamin B12 testing in lambs, fly strike control.

- **Barbers pole** - monitor for signs of disease - pale gums, depressed, exercise intolerant, increased breathing - and drench appropriately.
- **Ram preparations** - plan and book in ram palpations, Brucellosis testing and organise teasers.

## Deer

- Monitor hinds regularly during **fawning**.
- **Stag preparations** - ensure palpations are done and feet checked in good time prior to mating.

## Equine

- Maintain sport horses on **joint supplements** such as NV Halo Injection or Equinate™ Injection if ground is hard.
- Consider use of **electrolytes** for horses in heavy work particularly in hot weather.
- **Ryegrass staggers** - as the period of risk approaches monitor for altered behaviour and neurological signs - **article P5**.

**Last but not least enjoy the holiday period. Have a safe, enjoyable, very well-earned break with family and friends!**

# Dairy cows and a dry summer

Lindsay Rowe

In recent years, significant dry periods have been a feature of summer farming in our region and, with the current prediction of an El Niño weather pattern, the dry could be even more serious this season.

With the resulting restriction in pasture growth rates careful planning and monitoring is required to ensure that any loss of milk production and cow condition is kept to a minimum. Planning in this way can also reduce the risk of unnecessary stress falling on staff and management during an otherwise difficult period of the year.

The following points should all be part of the discussion that leads to the development of your **summer management plan**:

- Monitor your average pasture cover along with the pre-grazing cover and the post-grazing residual.
- Know your rotation speed, and what it should be, by monitoring the leaf emergence rate and the leaf stage at the time of grazing.
- Measure the quantities of supplement feed in the stacks as well as the rate at which



it is being fed - how much longer will it last if fed at the current rate?

- Plan to have at least 14 days of supplement (approximately 100kg DM per cow) available to feed when the rain comes so that pasture cover has time to recover before significant grazing pressure is applied.
- Plan how much supplement feed will be needed for the following winter and spring periods and "ring fence" that quantity so that it is available when required.
- Understand the break-even point for the purchase of extra supplement to fill any projected feed gaps - this point will vary depending on the price paid for the feed, the feeding rate, the number of days that the feed will be required and how early or late in the season it is required - more can be paid for feed to fill a short feed gap early in the summer than later in the season when there is less time left to recover the expense.

- Set a trigger point, based on feed reserves, for drying off and/or culling of poor producing and empty cows - removing 20% of the cows from the herd will lift the intake of the remaining cows by 25%.
- Monitor the body condition score (BCS) of individual cows in the herd - set triggers for drying off individual cows based on BCS, age and calving date so that they have sufficient time to regain target scores by the time they are due to calve.
- Consider a move to milking every 16 hours or once per day to save body condition.
- Ensure that the farm water system is sufficient and reliable enough to cope with the increased demand for drinking water.
- Monitor facial eczema spore counts and be ready to adopt preventative measures.

**Your Totally Vets veterinarian or Farm Consultant will be able to assist you in this planning process.**

# Perennial ryegrass staggers

Lucy Russell

This seasonal condition is caused by lolitrem, a fungal toxin, produced by an endophyte fungus found in ryegrass pastures and is NOT the same as "staggers" in cows due to hypomagnesaemia. Clinical cases are most commonly seen in horses, sheep and calves, but all animals can be affected.

Endophyte fungi flourish in the summer and autumn when it is warm. The toxin concentrates in the lower leaf sheath, flower heads and seeds, but can be found in all parts of the plant. With shorter grass and hard grazing, larger amounts of the toxin are ingested.

Clinical signs can vary but generally develop seven to fourteen days after exposure and are the result of the toxins interfering with nerve transmission. Those mildly affected become more nervous and flighty to handle and/or ride, and are sensitive to sudden movement and noise. Severely affected animals show fine tremors, severe head nodding, splaying of legs and may stumble, stagger, fall or become recumbent. Signs are generally made worse by stimulation.

Recovery relies on removal of the animal(s) from the contaminated pasture to a 'safe' paddock or yard. The time for full recovery is variable depending upon level and duration of exposure. Misadventure is the greatest risk during this time, so it is important to keep animals quiet and in an area free of hazards such as dams or rough terrain.

'Safe' pasture could be one containing little or no ryegrass, or be endophyte safe ryegrass seed (contains a modified endophyte strain which does not produce ryegrass staggers). Alternately paddocks containing plenty of grass, so that the animals don't overgraze down into the leaf sheath, can also be



satisfactory. Alternative feeds, such as hay and/or concentrates, should be fed, but note that hay made from affected pasture should be avoided because the toxin is still viable in the hay.

**Lastly, there is a vast range of products that may help treat or prevent ryegrass staggers. They are fed to at-risk animals to minimise toxin absorption, but they do vary in their claims, cost and effectiveness. So for more advice don't hesitate to give your vet a call.**

# Neighbours and your biosecurity

Leisa Norris

Infectious diseases can challenge the performance and threaten the lives of animals. This risk can extend across fence lines, so unless your farm is bordered on all sides by roads and/or rivers, or double fenced, biosecurity needs to be addressed.

Diseases to consider include Bovine Virus Diarrhoea, Johne's disease, Tuberculosis, Brucella ovis, Salmonella, and more recently Theileria orientalis, which can have large impacts on animal health. The majority of disease outbreaks are a consequence of introduction of infected animals onto a

property, rather than having contracted the disease "over the fence" from the neighbour. However situations do arise when the latter is the case.

Neighbours are not necessarily aware of what is happening next door and so don't have the knowledge, and hence an opportunity, to institute disease prevention or control measures.

So, if you have an infectious disease diagnosed on your property, four key points to consider are:

## 1. Impact of disease on your property?

Will vary depending on type of disease and severity - from decreased growth weights and production, to movement controls and even stock deaths.

## 2. Control and containment of disease on your property?

Variable and specific to each situation.

## 3. Risk to, and potential impact on, neighbours' animals?

There may be little impact on your operation but potentially enormous impact on your neighbour(s) who, for example, has stud ram hoggets or bulls for sale, has dairy graziers, or has heifers destined to go on a boat to China.

## 4. Prevention of future disease?

Vaccination, pre-entry testing or closed-herd systems are all ways of reducing the risks of (re-)introduction of a disease. Generally control can be achieved through means such as preventative treatment(s), test and slaughter and/or vaccination programmes.

If faced with a disease outbreak on your farm, remember to consider your neighbour(s) and the impact that it may have on them as well as on your property. Communicate with them to create an awareness of the disease and use your vet for advice and support (which is always in confidence) to help create that awareness.

# Why pregnancy test your cows early?

Ryan Carr

If you went to a business advisor or accountant to try to improve your business and make more of a profit it would be absolutely necessary to have a full set of financial information. No one could help you pin-point where gains could be made without the full details of your costs and incomes.

Similarly having accurate dates for when each cow got in calf is necessary information to pin-point where gains can be made in the reproductive performance of your herd. We need this to get a full picture of what is going

on on-farm. Pregnancy testing your cows early is the only way to get these accurate dates.

Improving reproductive performance basically means getting cows in calf earlier. Cows that are in calf earlier give you more days in milk and more artificial insemination (AI) replacement calves. A cow that is in calf early is obviously more likely to get in calf early the following year, giving you more days in milk and more AI replacement calves and so on and so on. Getting cows in calf early is a major component of getting the most profit out of your farm.

Early pregnancy testing involves scanning the herd six weeks after the end of AI and then retesting the cows that weren't pregnant at the first test six weeks after the bulls have come out. This allows every pregnancy to be given an accurate age. If only one test is done after the end of mating the person scanning can only guess at the age of the earliest pregnancies (no matter how good they are!). If cows are only declared pregnant or empty during testing we have even less information to go on.

As well as giving us information to be able to improve herd reproduction early pregnancy

testing has other benefits. It allows you to:

- cull empty cows sooner
- dry off early calving cows early
- milk later calving cows longer
- know which cows to send away for grazing and for how long
- better allocate cows to the springer mob next calving

For a 400 cow farm early pregnancy testing works out to be around an extra \$700.00 to \$800.00 compared to doing a single scan. So if you get an extra seven or eight cows in calf a cycle earlier, using the information the early scanning gets you, and it has paid for itself in days in milk alone. There is of course the extra hassle factor of getting the cows in for two scans instead of one, and having them soak the shed in poo, but for all the benefits it is surely worth it?!

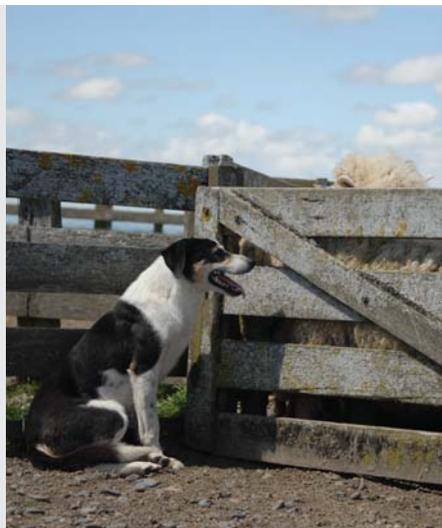
**If you think you want to give early pregnancy scanning a go, and/or you want help analysing your current information, don't hesitate to talk things through with your vet.**

## Feeding working dogs

Vicky Charman

At this time of year working dogs are working long and hard hours. Feeding a high quality diet formulated for a high work load has been proven to increase endurance and decrease both soft tissue injuries and stress fracture of bones.

Studies have shown that dogs who constantly work and have to perform, unlike household pets, require a nutrient rich diet that is high in calories. Calories in dog food come from fats, carbohydrates and protein. Fat is the most calorically dense of the three sources. Carbohydrates provide quick energy suited for short bursts of energy. Protein, particularly that from animals, not only provides calories



for sustained energy but also the essential amino acids for muscle building and tissue repair.

Farm dogs have traditionally been fed either meat (farm kill) or cereal based carbohydrate biscuits such as Tux® and Pedigree®. An average diet (60% whole carcass and 40% Tux®) has 19% protein, 32% carbohydrate and 48% fat. This level of protein is far from ideal. Consequently, working dogs on these types of diets need to consume relatively

large quantities of food to meet their energy requirements, and lack the energy to work and perform for sustained periods of time.

Feeding a calorie rich animal protein based diet will have significant benefits to their working performance and their body condition.

**A diet that is high in protein (at least 25%), high in fat (at least 20%) and has an energy content over 4000kcal/kg is ideal for a working dog.** Higher quality performance diets also have other ingredients that enhances the efficiency of fat metabolism, thereby lowering the heat production of the body which allows a dog to "run cooler" when performing heavy work.

**Whatever you are currently feeding, be sure to check the label and that it fits the criteria outlined in bold above. Additionally check that it has been tested and approved by the American Association of Feed Control Officials (AAFCO) so you know that it is a complete and balanced feed source.**



# The thinking man's guide to Barber's Pole worm management

Ginny Dodunski

Barber's Pole (*Haemonchus contortus*) is the worm most likely to strike fear into the heart of the average sheep farmer. It sucks blood from the stomach lining and big burdens can remove enough blood to kill lambs, and less often, adult sheep.

It can seem to strike without warning, mostly in late summer and autumn, though we do see the odd case prior to Christmas from time to time. Most outbreaks occur after a spell of hot dry weather followed by some moisture. The textbooks say 25mm of rain, but a few heavy dews can be enough to spark it up.

With the right environmental conditions, and in the absence of effective management/control, 'outbreak' situations occur where larval numbers on pasture rise rapidly - their ingestion by grazing sheep results in the sudden appearance of ill-thrift, lethargy and deaths.

One of the problems with Barber's Pole is in predicting the seasonal onset of challenge. A study we did in the Manawatu in 2004 found no correlation between farms for the timing and severity of Barber's Pole challenge and, even on the same farm, the relationship between burdens in the ewes and lambs was weak.

Anyone who's been caught by a decent Barber's Pole outbreak can be forgiven for thinking it's not worth taking the risk of leaving stock unprotected. However this can result in drench over-use and, given that you want to minimise the use of long acting drenches for sustainability reasons, how could you better assess the situation on your place?

- A faecal egg count (FEC) of lambs, even while still on mum, can be a guide - the egg counts of un-weaned lambs can vary enormously, and very high FECs could point to Barber's Pole being present.
- Consider investing \$70.00 in a larval culture - we send a mixed faecal sample

to the laboratory to hatch and grow out the eggs. The larvae are examined under a microscope and we get a breakdown of the species present.

- Often pre-Christmas there will be no or very few Barber's Pole in these samples, but if you find there are, it can be a cue to early action.
- Watch this space - in the future we will have a faster DNA based test to determine which worm species are present in faecal samples, but it is still currently being validated.
- If you are handling lambs, look for paleness of gums and eye membranes and/or 'bottle jaw'.
- Risk assessment:
  - Likely level of pasture contamination - if you carried more lambs into winter than normal last season, contamination could be higher.
  - Drenching history of hoggets and ewes as far back as last autumn.
  - Grazing history and feed levels.
  - Presence of large numbers of wild goats.

**Finally, talk to your vet - we can help you decide what monitoring you need to do to ensure you are not caught by surprise with an early outbreak.**

# Zoonoses... Diseases humans can get from animals

Helen Mather

Zoonoses are defined as infections which are naturally transmitted between animals and people. Because of the risk to their own health, people handling animals need to know about such diseases and the precautions they must take to minimise the risk of infection.

**Leptospirosis** or "lepto", is the most well-known zoonosis in New Zealand (NZ) agriculture and one of the most widespread occupationally acquired zoonoses in the world. NZ has high infection rates, with around 100 cases reported (60% requiring hospitalisation) each year, but it is estimated that 40-50 times more cases go unreported. Despite years of vaccination in cattle, 30% of dairy herds have cows passing lepto in their urine. Urine from pigs, sheep, deer, rodents and wild animals can also be a source of infection.

# Quarantine treatments

Trevor Cook

The term quarantine means simply protecting yourself against things that you do not want. Any people diagnosed with Ebola will be put into quarantine to prevent them from infecting other people. At a farm level quarantining means keeping nasty's out.

The term 'nasty's' could apply to infectious diseases such as Bovine Virus Diarrhoea (BVD) and Infectious Bovine Rhinotracheitis (IBR), but it particularly applies to keeping out drench resistant worms. The drench resistant status of a farm belongs to the farm, so protecting it has value. Obviously this value is from a stock health point of view, but also from its monetary value. A recent farm sale was hampered by its level of drench resistance which was severe enough to put some buyers off. There are a series of actions that can be taken that will slow down any selection for resistance. An important one is to not allow resistant worms on.

Preventing such an entry requires more than simply drenching on or soon after arrival. To be fully effective details need considering. First of all is the drench used on arrival. It must be a product that is most likely to remove any resistant worms in arriving stock. For sheep that is one of the new types of drench, that is



Zolvix® or Startect®. For cattle the best that we have is an oral triple combination product such as Matrix C.

Secondly, quarantining in-coming stock is more than just a drench. It means keeping these animals off pastures for 24 hours so that the worm eggs that are already on their way out are deposited somewhere from which they cannot complete their life cycle - yards are ideal. The perfectionist will recommend that a faecal egg count (FEC) is done on the in-coming animals and that they are not released onto pasture until that count is zero. But being practical is important too and the bulk of any risk of is removed by that 24 hour stand-down. As long as a fully effective drench has been used.

Thirdly, particularly if a FEC is not being done, be sure to put the in-coming animals onto contaminated pastures - that is, not "clean" grazing. This means that the tiny number of worm eggs that might still come out are mixed with lots of resident ones and so are very diluted. If that grazing has very few resident worms on it, such as new grass, then that tiny leak of eggs can be more dominant and more likely to be incorporated into the resident population.

So, it is truly important for any animals coming on to the farm be quarantined treated. The more that come on the more stringent that treatment needs to be. For a lamb finisher, for which all of the animals in the system have come from the outside, the sustainability of that system is very much influenced by the integrity of the quarantine procedure. For the hill country farm, for which the only sheep that come on are new breeding rams, the quarantine treatment is much more simple to apply and there is much less risk.

Don't forget the other actions that will slow the selection for resistance. In brief they are:

- To use only fully effective combination products.
- To maintain an active refugia process.
- To minimise the treatment of adult stock.
- To minimise the use of persistent acting products - these are capsules and moxidectin. We will remind you of these in subsequent newsletters.

**For advice and assistance in formulating a quarantine plan that's right for your farm talk it over with your vet at their next visit.**

**Cryptosporidiosis** is a common cause of calf scours and is transmitted to humans by direct contact with animal faeces, or contamination of water or food. Good sanitation and hygiene are essential when handling calves.

**Campylobacter** exists in the gastro-intestinal tract of ruminants, poultry and other domestic animals causing them no harm. These animals are the sources of most human infections. Humans are infected via the oral route, with the infective dose being relatively low. It causes diarrhoea with abdominal cramps.

**Salmonellosis** in humans is a gastro-intestinal infection associated with contact with infected faeces. Some types of Salmonella cause disease in calves and mature cattle, though many animals may carry Salmonella without showing signs. Salmonella can multiply in many food products kept at room temperature. Therefore salmonellosis is often a food-transmitted disease.

**Ringworm** is a fungal infection common in young cattle and is easily transmitted to humans. Practice good hygiene when working

with ringworm infected stock. Cats, dogs, horses, sheep and rodents are also susceptible and possible sources of human infection.

**Any people who have close contact with animals need to maintain stringent cleanliness and hygiene standards and vaccinate where possible, such as for leptospirosis, in order to protect themselves and those around them from these potentially debilitating diseases.**

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