

# Animal Health Update

South East  
Local Land  
Services

October 2018

Welcome Evelyn Walker District Veterinarian South Coast



We welcome Evelyn Walker, our new District Veterinarian based in Berry, as we sadly farewell Steve Whittaker from Berry and Helen Schaefer from Bega. Helen and Steve have both contributed a huge amount to the South East District Vet team and will be missed by the producers in their regions as well as the Vet team. We thank them both very much and wish them well on their future endeavors.

Evelyn has been a District Veterinarian based in Dubbo for the last 8 years. She brings with her a wealth of experience and knowledge in sheep and beef cattle herd medicine, and has almost completed her PhD on Chlamydia in sheep and cattle. She enjoys working with farmers, whether setting up a drench resistance trial, doing a herd disease investigation, or providing general livestock advice.

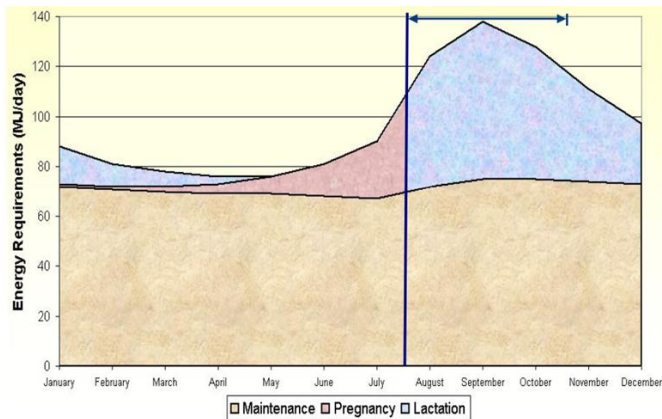
In her spare time, Evelyn competes and trains her dogs in agility and hopes to check out the coastal area. Evelyn is very excited to be joining South East Local Land Services and is looking forward to meeting livestock producers from the local area. Feel free to drop in to the Berry office and say g'day.

## Local Disease Watch

### Alexandra Stephens District Veterinarian Yass

DVs have seen similar cases this month to last month, with more cases of 'bottle jaw' in cattle and sheep due to low protein intake, and deaths in sheep from hypocalcaemia, pulpy kidney and bladder stones.

This month the DVs have continued to support the RSPCA and individual producers in developing rations to prevent further weight loss and deaths in cattle and sheep. Poorer quality hays can be very low in protein and energy and additional supplementation with a higher energy and protein supplement is required to prevent further weight loss. Milk production has a high energy and protein demand and rations need to be sufficient in both quality and quantity. Lactating cattle require a diet with a minimum of 10-12% protein. This graph shows the rapid increase in energy requirement for cattle in lactation.



Feed test kits are available from Local Land Services offices and will give you results within a week on the protein and energy values of the feed. The NSW DPI-sponsored website [www.droughthub.nsw.gov.au/](http://www.droughthub.nsw.gov.au/) is a great source of wide-ranging information. In particular, the publication *Managing Drought* is a comprehensive guide to drought management of livestock. The free downloadable phone app the 'drought feed calculator' is also well worth putting on your phone. It allows you to put in up to 3 feed types and is programmed with stock requirements, which allows you to develop a balanced ration and calculate the cost of feeding.

Below average spring pasture growth is predicted for most parts of the region. Livestock owners are making hard decisions about which stock to sell, and what supplementary feed to buy, and considering and researching options such as early weaning.

Early weaning will be a valuable tool this year to manage fat score/condition of breeding females. Weaning lambs and calves can be done successfully, but relies on good planning and good management.

Brett Littler from Central West Local Land Services recently did a talk on early weaning calves from drought stressed cows. This talk has been recorded and is available [here](#).

If you would like assistance with assessing your stock, developing rations or early weaning please contact your local DV for professional advice and support.

**Hypocalcaemia**, is a deficiency of calcium and is more inclined to show up when sheep are put under stress, such as being held off feed for the day for shearing. It presents as weakness and collapse progressing to death. Ewes are particularly susceptible in early lactation as they require more calcium than they can get from the feed alone, drawing on stores of calcium in the bones. All classes of stock can be affected if the diet is not balanced. The disease is prevented by providing a ration that is balanced for calcium. Grains are naturally high in phosphorus but low in calcium and lime must be added at 1-2% by weight of grain fed to achieve a balanced ration. This can be fed as a loose lick with salt if mixing it through the ration is not an option.

Also seen this month have been **bladder stones** in both wethers and rams. Struvite stones are the most frequent stone type seen in male sheep on formulated diets with low roughage. They result from concentrated urine, in sheep on a high grain diet (especially oats), where minimal roughage is being fed, and there is a low calcium: phosphorus ratio in the feed (i.e. grain is being fed without balancing with limestone at 2% of the diet). On the other hand calcium carbonate stones can form where sheep are on a high clover diet on alkaline water, or where calcium is being supplemented at too high a rate. There are a number of prevention tips and producers are encouraged to contact the DV if they are having issues. Prevention tips include increasing the roughage in the diet, ensuring adequate clean quality water, balancing the diet accurately for Calcium: Phosphorus ratio and in some cases feeding salt and/or ammonium chloride to increase water intake and acidify the urine.

As with most things veterinary, prevention is the best option, as treatment to dissolve stones or deposits has had limited success.

### Preparing for calf marking

Lou Baskind District Veterinarian Braidwood

Preparation for calf marking is important to increase efficiency, safety, reduce stress and reduce the risk of infection. Check that all equipment and your yards are in good working order and clean. Purchase or check your vaccines, needles, ear tags, scalpels and disinfectant or rings. Remember to keep vaccines at the correct storage temperature, and to use them within the recommended time frame. Ensure vaccine needles are new, clean, sharp and sterile. Dirty needles will cause lumps and abscesses.

All stock should be vaccinated to protect them against infectious diseases which have significant impact on welfare or cause death. As a minimum, give the 5-in-1 vaccine for clostridial diseases. Think of this as the "core" vaccine, protecting stock against many of the causes of sudden death: tetanus, pulpy kidney, malignant oedema and black's disease. The 5-in-1 vaccine is cheap insurance against potential stock losses.

Vaccinating the cows in the last trimester of pregnancy allows calves to be protected prior to their first vaccine and at calf marking. Castration carries a risk of tetanus, and so good antibody levels are essential. If cows have not been vaccinated, vaccinate the calves four weeks before marking. Pulpy kidney (enterotoxaemia) is of particular importance this year because grain feeding or rapid pasture changes such as a green flush increase the risk. **Most importantly the first vaccine given to calves only evokes a temporary response so a second vaccine is needed 4 -6 weeks later to ensure**

**long term protection.** Another booster is then needed at least annually but 3 monthly boosters are recommended for young stock to minimise the risk of pulpy kidney.

Other vaccines to consider for this year's marking are the Leptospirosis and Pinkeye (Piliguard) vaccines. Leptospirosis is a disease that can cause abortions and calf mortalities in your cattle, but also it can transmit to humans and cause debilitating illness. Vaccinating the animals protects the people in contact with them. Leptospirosis has been identified in our region, and can be harboured and transmitted by feral pigs.

Piliguard® vaccine is useful against the common and very contagious condition 'pink-eye' caused by the bacteria *Moraxella bovis* in cattle. It is given as a single dose 3 - 6 weeks prior to the pinkeye season each year. Calves are usually more susceptible but it can occur in cattle of any age. We expect that due to the drought some producers can expect a bad 'pink-eye' season this summer and autumn, due to dry and dusty conditions and congregation for feeding. This is especially the case on properties where pink eye regularly causes problems. The vaccine is good insurance because generally the cost of vaccine will be less than the cost of treatment and animals affected with pink eye suffer a real setback in weight gain. Bear in mind that the vaccine will not provide 100% protection and a few cases of eye problems does not mean that the vaccine hasn't worked.

Use the least painful method to identify stock that is appropriate to your management system. In NSW, branding is not a requirement and as such, ear tagging is recommended. Management tags are generally applied at marking but remember that all stock must have an NLIS tag prior to leaving the property.

Perform the calf marking procedures in order of first vaccinate, then ear tag and/or ear notch, then brand, then castrate and then dehorn to reduce risk of contamination of any open wounds.

A person castrating cattle must have the relevant knowledge, experience and skills, or be under the direct supervision of a person who has the relevant knowledge, experience and skills. The cutting method in particular is a skilled procedure and has safety risks for the operator. The value of a calf cradle can't be understated in terms of offering good restraint to increase efficiency and safety.

Note that there are new products on the market that can assist with pain relief.

Buccalgesic® is an anti-inflammatory, which is given and absorbed through the side of the mouth using a hook-shaped applicator. Buccalgesic® can be used for

both the ring and knife methods of castration.

Alternatively Tri-Solfen Topical Anaesthetic® can be used when castrating with a knife. The WHP for meat for Buccalgesic is 14 days and for Tri-Solfen is 90 days. Keep an eye out for NumNuts®, a tool which, once on the market, will offer a ring and local anaesthetic option.

Don't forget your own health and safety. Take precautions to prevent contact with blood, urine and other body fluids. Cover any cuts and wounds, and make sure you are Q-fever vaccinated. Disposable nitrile gloves are an affordable and convenient way to keep hands clean. Have somewhere safe to dispose of scalpels and needles, a sharps container is the best option.

### **Neospora caninum abortion- are kangaroos the culprit?**

Jess McLeod Final year student DVM Sydney University

*Neospora caninum* is a parasite that infects cattle, causing abortion. It is estimated to cause over 30% of abortions in dairy and beef herds on the NSW coast, and was recently diagnosed as the cause of abortion on a property in the Central Tablelands.

*Neospora* is estimated to cost the beef industry \$25 million per year, and recent studies have indicated that kangaroos may be a more significant contributor to the lifecycle than previously thought. As such, inland beef producers should become more aware of both the risks of transmission and measures for prevention and control.

*Neospora caninum* has a complex lifecycle involving dogs as the main host and a range of intermediate hosts, including cattle, deer and kangaroos. Dogs shed *Neospora* eggs in their faeces, which are then ingested by grazing cattle and wildlife. Once inside the cow, the eggs hatch and form cysts in muscle tissue and the reproductive tract, which can lead to abortion. When infected carcasses or afterbirth are scavenged by dogs, the lifecycle begins again. Infected cattle may also give birth to live, clinically normal calves, which are themselves infected, and capable of maintaining infection in a herd via "vertical" transmission, from mother to calf.

Abortion typically occurs between 4 and 7 months, and infected cows that do not abort will likely have an infected calf, maintaining the disease in the herd. This is the most likely factor contributing to sub-par calving rates. Cattle are infected for life, and are much more likely to abort when under stress, either nutritional or disease-related.

Infected cattle are not contagious to others- vertical transmission to female offspring is considered the main method of infection. However, if there are roaming dogs

(either feral or domestic) with access to infected tissue, then cattle are at risk of “horizontal” infection via ingestion of eggs from dog faeces. Infection of naïve cattle from contaminated pastures seems to be the driving cause for “abortion storms”, where up to 30% of the herd may abort.

Current advice for prevention of *Neospora* outbreaks recommends limiting dogs’ access to infected tissues (carcasses and afterbirth) to minimise pasture contamination with eggs. Controlling dog roaming, preventing scavenging, appropriately disposing of dead calves, kangaroos and afterbirth (e.g. burning or burying), and culling feral dogs are the main methods of control. Infected cattle can be identified with a blood test.

While cattle and dogs are the focus of control efforts, recent research has indicated that kangaroos could play a more significant role in the lifecycle. A study of a population of western grey kangaroos in suburban Perth found that 18% had been infected with *Neospora*. A similar survey (unpublished) of a population of eastern greys in the South East district found 29.4% also had evidence of infection.

The nature of beef farming in Australia is such that cattle, dogs and kangaroos cohabit grazing land, and culled kangaroos are often left behind on pasture. Given the surprisingly high rates of infection found in kangaroos, those carcasses could be a more significant source of infection to scavenging dogs than previously thought, further contaminating pasture. This could mean a higher risk of more severe “abortion storms”, or simply that more low level, sporadic abortions are a result of cattle grazing contaminated pasture.

Advice for minimising *Neospora* infection in cattle should now also include control of kangaroo populations, appropriate disposal of kangaroo carcasses to prevent scavenging, and not feeding kangaroo meat to dogs.

A blood test is available to diagnose *Neospora caninum* infection in cattle, along with a variety of other infectious causes of abortion such as brucellosis, leptospirosis and Pestivirus. If you suspect any of these diseases or wish to learn more, contact your local District Veterinarian.

### [Worm monthly update](#)

[Alexandra Stephens, Yass District Vet](#)

With lamb marking coming up in many of the spring lambing enterprises, and ewes having been on short green pastures, many producers are getting worm counts done to check how the ewes and lambs are traveling. Worm counts this month have been variable but generally have been lower to moderate; indicating a successful pre-lambing drench, but continued pressure

on stock both nutritionally and with grazing pressure into the larval pick up zone. Some results have indicated a need to drench ewes while others have indicated that ewes should be right until lamb weaning. Cultures done of these checks are also proving valuable for detecting the potential for barber's pole worm to cause problems should seasonal conditions become favourable.

Barber's pole worm is an emerging problem in the South East and this worm's strength is that it is a prolific egg layer. Although conditions are not suitable for it now, it's presence in worm egg counts warns us to be aware of it and monitor weather conditions and sheep faecal egg counts regularly. Should conditions become warm and wet (daily temp max >18°C and >15mm rain) with spring or summer storms, the worm can complete a worm cycle within 18 days and problems can rapidly escalate. This is particularly the case where pastures are still heavily contaminated with larvae from the previous autumn. Controlling this worm is about knowing that it is there and controlling larval build up on the pastures. This can be through grazing management/pasture rotation, Barbervax or the use of long acting drenches when required. Your best tool in ensuring you stay on top of barber's pole worm is 4-6 weekly faecal egg count monitoring. Kits can be obtained straight from EMAI or picked up from your nearest Local Land Services office or your local rural merchandising store.

For more information see [wormboss.com](http://wormboss.com)

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