

Animal Health Update

South East Local Land Services

May 2019

Local disease watch

Alexandra Stephens, District Veterinarian Yass.

Pasture conditions remain short this autumn as grazing pressure is outstripping autumn growth on most farms. In most cases feed quality is good however it is restricted in quantity. Ground cover is becoming a greater issue on many properties, and available roughage is minimal. Fodder crops are and will provide important relief. Landholders are continuing to make important decisions regarding stocking rates and feed budgeting to match requirements with needs for the upcoming winter period.

Animal health issues seen by District Veterinarians over the last month include:

- **Nitrate/nitrite poisoning** of cattle from both purchased and homemade hay. It is very important to get hay tested for feed quality and nitrate/nitrite levels. This is especially the case during the drought as excess nitrates accumulate in plants when they are stressed. If the plant material dies or is harvested the accumulated nitrate stays in the plant material and does not disappear. This is why hays and silage can contain toxic amounts of nitrate. Nitrate levels above 10,000 ppm are considered dangerous and must be fed with caution. Toxicity is most marked when hungry stock that are not conditioned to high nitrate feeds suddenly eat large amounts, such as when fed toxic hay or introduced to a crop.

Ruminants have different capacities to detoxify or convert nitrates in the rumen. Sheep are more tolerant to nitrates than cattle. An animal in good body condition receiving a diet that meets daily nutrient requirements can convert nitrate to nitrite and finally to ammonia more efficiently than an animal that is inadequately fed or in poor condition. Animals in poor condition have more trouble converting nitrite to ammonia.

Gradual introduction is important if nitrates are an issue. Don't put hungry stock onto a risky crop or pasture – fill them up with hay and graze for 0.5 – 1 hour in the afternoon.

Gradually increase grazing time each day. It will take five to seven days for the animals to become adjusted to the new feed.

If feeding risky hay or silage, feed out in very small amounts using the “little amounts often” principle. **Spread bales out** so all stock can get a bit – don’t dump a bale in the paddock as some stock will get a gut full. A feed mixer is ideal as you can mix the feed through a ration.

- **Barber’s pole outbreaks in sheep:** Barber’s pole worm continues to catch producers in late summer and autumn in our region due to grazing short green infected pastures, some storm activity and mild temperature conditions. The life cycle of barber’s pole is very short and anaemia and deaths can be seen within 6 weeks of drenching.
- **Grain poisoning and shy feeders:** Lick feeders are mostly very useful, however they can cause problems. Problems mostly happen when there are too many sheep expected to eat from too few feeders, or where there is a size discrepancy in the sheep, such as when growing out weaners. Remember when using lick feeders, if feeding space is limited it results in shy feeders and bullies. The ideal ratio is less than 200 sheep to a lick feeder. Draft and match like with like sized individuals when feeding both cattle and sheep. It is also important to ensure grain is balance for calcium and salt. For every 100 kgs of grain fed add 1.5kgs of limestone and 0.5kgs of salt. If grain feeding for more than 3 months without access to green feed your stock may be becoming deficient in Vitamins A and E. Administer a Vitamin A,D and E injection every 3 months.
- **Exposure ketosis:** Losses due to exposure post shearing are most likely to be seen when there is a sudden drop in temperature of more than 10 degrees, and there is both rain and wind. Losses are worse if sheep do not have available energy reserves to draw upon. Once an animal has lowered its core body temperature by more than 2.5 degrees it can be very hard to save it. Prevention through the preemptive provision of shelter is best combined with increasing feeding rates. Those sheep that have not been receiving grain feeding are best fed with a quality hay and this is also a good option when wanting to top up feeding rates.
- **Animal welfare concerns re individual fly struck sheep:** the end of summer is the time that we need to boost our enthusiasm for checking our flock for fly blown sheep and treating effectively. Remember that if you have any concerns regarding the efficacy of your fly preventative treatment we have kits at the LLS office, which enable you to send maggots off for resistance testing. This provides important feedback both to you and your industry. Effective control now means fewer larvae going to ground during winter and therefore fewer flies hatching out the following summer.
- **Theileria causing abortion in cattle herd on the coast:** This microscopic parasite invades and destroys red blood cells of cattle. In many areas it is believed to be spread by ticks, although other blood-suckers like biting flies may also play a role. The disease is more common in coastal herds, associated with fever, anaemia, jaundice, abortion and deaths.

Take advantage of winter for integrated parasite management

Lou Baskind, District Veterinarian Palerang

- **Liver fluke pre-winter drench**

Liver fluke is one of the most significant parasites of livestock in our region. In cattle, it is estimated that a fluke infection can reduce weight gain in growing animals by 700g to 1.2kg per day.

The economic impact of liver fluke includes the cost of prevention and treatment. Poor timing of drenches, or poor choice of chemicals, can be expensive and unrewarding. Using an integrated approach, with the best mix of grazing management and strategic drenching, makes fluke control more economical and effective. This approach avoids undue reliance on drenches and reduces the pressure on the development of chemical resistance.

Liver fluke is endemic to the South East. If you have springs, soaks, seepages, marshy stream banks or permanently wet areas around pipes and troughs, then it is likely you have the carrier snail. Infection of the livestock is then dependent on grazing history of these 'flukey' areas. In drought years, the exposure of livestock to liver fluke is increased because feed options are limited, forcing the grazing of flukey habitat.

Winter offers an opportunity to reset your fluke management program. In winter both the snail, and the liver fluke inside the snail, will significantly decrease their reproduction rate or hibernate altogether. This substantially reduces the reinfection of animals with immature liver fluke until late spring. **A strategic drench at this time, aimed at both immature and mature liver fluke in the animal, will remove the infection without being faced with immediate reinfection.**

A long term solution is to fence out flukey areas to prevent them from being grazed the following year.

The pre-winter drench must be one that kills early immature, late immature and mature fluke in the host. Currently, triclabendazole is the recommended product for the pre-winter fluke drench in sheep, and triclabendazole or nitroxynil in cattle. Resistance of liver fluke to triclabendazole is emerging, but it appears that few properties in Australia currently have resistance to this active chemical. If you suspect resistance to a drench product on your property, contact the manufacturer of that product or your district veterinarian.

If you are unsure whether to treat your livestock with this strategic drench, talk to your livestock advisor or vet. Options for testing for fluke include abattoir surveillance, faecal egg counts, faecal antigen tests, blood tests, and identification of the carrier snail.

- **Grazing management calendar**

Reducing exposure of the most susceptible classes of livestock to intestinal worm larvae improves the effectiveness of a worm management program. Grazing management

avoids undue reliance on drench treatments, reduces cost and labour from drenching and will improve gains in milk production and growth.

Animals that are least resistant to worms are:

- weaned lambs less than 1-year-old
- late pregnant and lactating ewes
- weaned calves less than 18 months old
- hogget sheep (up to 18 months of age)
- cows with calves at foot.

Weaner lambs and cattle facing their first winter should be on “clean” or “low risk” pastures. If there is going to be a feed deficit, consider your plans for supplementary feeding to maintain stock condition. Nutrition will have a major impact on the resistance and resilience of stock to worms. Cold weather will increase nutritional needs significantly.

Contamination of pastures with worm eggs in autumn results in pastures being infective in spring. Looking ahead to spring lambing and calving, paddocks need to have been set aside to ensure they have grown adequate nutrition and are free from infective worm larvae by spring. Don't forget to do a pasture budget to ensure these paddocks will support the nutritional needs of stock going in. These paddocks should have a high level of nutrition to support the needs of pregnancy, lactation and growth. If lambing, they should be able to maintain the stock for the duration of the period, so the mob is not disturbed.

The next decision to make soon is which paddocks will be prepared as low-risk for summer weaning.

To create a clean paddock, the paddock must, for the five months before use in spring, or four months before use in summer, be

- spelled completely, or
 - grazed by resistant stock such as adult cattle >18m old, or
 - grazed by a different species (e.g. cattle on a paddock for sheep), or
 - grazed by the same species that were treated with an effective drench, grazed for the period 3 weeks after the treatment and then removed, or
 - cultivated and planted with a fodder crop and left to grow until use, or
 - a combination of the above, AND
 - ideally, by the time the paddock is used, the pasture length should be higher than 10cm, so stock are grazing above the worm larvae zone.
- **WormTest through winter**
It is important to closely monitor susceptible classes of sheep for scour worms through winter with a WormTest.

From March, do the first WormTest four to six weeks after a rainfall event of 20mm or more, which then has had follow-up rain of 10mm or more in the following few weeks. Then do a WormTest every four to six weeks from then on. In most of the South East

region, a rain event like that did occur in mid to late March so if you haven't done a WormTest yet, do one now.

WormTests are very straight forward and test kits are available at LLS offices and rural merchandising stores. Please feel free to ask your District Vet or Agriculture Advisor for some tips on how to do the collection and fill in the submission forms.

Say no to swill and RAM

The Australian agricultural industry is internationally recognized as being free from devastating diseases that affect livestock industries in other countries. Quarantine laws provide the first line of defence against these diseases. The next line of defence is laws that prohibit the feeding of "swill" to pigs and "RAM" to ruminants. Further protection is provided by laws that require that a person to notify authorities on any suspicion of an unusual disease occurrence.

Swill feeding is the traditional name for the feeding of food scraps to pigs. Many people do not know that **it is illegal to feed meat and meat products, or food which has been in contact with meat products to pigs.** It is a dangerous practice because it can introduce disease, particularly foot and mouth disease or African swine fever and put the whole economy at risk. It is illegal to feed "swill" or "prohibited substances" to pigs in all Australian states and territories. It is also illegal to run pigs with ruminant stock (sheep, cattle, alpacas, goats and deer).

For more information on what you can and can't feed your pigs, visit www.dpi.nsw.gov.au/animals-and-livestock/pigs/pig-nutrition/swill-feeding.

While we are discussing feed bans there are also restrictions on what can be fed to ruminants. **Australia has an inclusive ruminant feed ban on the feeding to all ruminants of all meals, including meat and bone meal, derived from all vertebrates, including fish and birds.** This is to help keep Australia BSE or "Mad cows disease" free.

There are a number of parasites and viruses that can seriously affect the health and productivity of pigs and the broader livestock industry. Some of these diseases are exotic and 'notifiable' under NSW biosecurity legislation. This means that you must notify authorities immediately if you see clinical signs or deaths in animals that are unusual and you cannot explain.

The Emergency Animal Diseases Watch Hotline is 1800 675 888

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