

Animal Health Update

South East Local Land Services

August 2019

LOCAL DISEASE WATCH

Alex Stephens District Veterinarian Yass.

Winter has arrived and there have been some very cold frosty mornings and some days of severe wind chill, but it has been a dry July with many unseasonably warm still days. The August update is focused on maintaining your cattle herd fertility in these drier times, and management of calf scours.

For sheep, management of ewe nutrition through lambing will have a big impact on lamb and ewe survival. Many producers will commence lamb marking this month and consideration of hygiene and pain relief at lamb marking is important to minimise the transfer of the disease *Mycoplasma Ovis*.

August is an important time to monitor egg counts in sheep, for both scour worms and barber's pole worms.

Counts have been very individual to properties with ranges from below 50 on some properties to over 800 on others. The higher counts are notable as in many cases the sheep had been drenched in late autumn but have still become reinfected with barber's pole worm from hatched larvae over the late autumn/winter period. It is important to look for this as these worms may be causing ill thrift and anaemia without scouring. Anaemia can also make sheep more prone to nutritional and cold stress, particularly important during a cold snap.

It is also very important that sheep receive an effective drench prior to the weather warming again in spring, and are rotated to safer pastures to control the barber's pole life cycle this following spring. Pasture rotation and effective drenching is very important for barber's pole control. If pasture rotation is not an option and frequent drenching is required the Barbervax® vaccine against barber's pole should really be considered to avoid the heavy reliance on drenches and consequential resistance development.

August is also an important time to **drench young cattle for worms** and a **strategic time to drench all cattle for fluke**, if fluke is a problem parasite on your property.

FOCUS ON FEMALE FERTILITY- MANAGING COWS FROM CALVING TO JOINING

Lou Baskind District Veterinarian Braidwood and Matt Lieschke Ag Advisor Goulburn

The calving period is getting underway, and that means it's time to plan ahead to the next big event, joining. While it might seem like a long way away, it's time to put measures in place now to optimise fertility and the future productivity of your beef herd.

Feeding a breeding cow without the production of a calf is a huge expense. Some enterprises will do this intentionally, such as survival feeding cows with high value genetics or pets, where destocking is



Local Land
Services

We help secure the future of agriculture and the environment for NSW communities.

www.lls.nsw.gov.au

not an option. Some may have chosen to skip a breeding season where calves do not provide a large proportion of the income. But for many producers, a normal number of calves is absolutely essential to offset the costs involved in supplementary feeding. With no significant rain in sight, a hard look at plans for productivity or further destocking might be in order.

Several local herds that had cows in low condition at joining last year have had very disappointing pregnancy rates. Despite investigations into other causes such as infections and micronutrient deficiencies, this has really come down to low body condition and insufficient nutrition prior to joining.

If the decision is to aim for normal production targets, then feeding at the right time, and the right amount will help to optimise fertility at the time of joining. To ensure cows fall pregnant and that calves are born around the same time each year, cows need to conceive within 3 months of calving. This means she needs enough energy to meet her own maintenance requirements and to produce milk, and enough on top of that to get the reproductive tract repaired and ready for a new pregnancy. This is particularly hard on heifers between calving their first calf and conceiving their second as they are still growing.

Fat score at calving, cow age and nutrition during early lactation all affect fertility at joining. Research shows that the higher the fat score at calving the greater the chance of getting back in calf again (Table 1). The general recommendation is to calve down in Fat Score 3 (Figure 1). This target is often quite achievable in normal years, but two years into drought and many breeding cows are about to calve down in sub-optimal condition, having not been able to regain sufficient weight during the autumn/winter period.

Table 1: Impact of fat score at calving and the percentage of cows cycling after calving

Fat Score at calving	Days after calving, % on heat		
	50 days	70 days	90 days
1 – 2 (0-6mm P8)	34%	55%	66%
3 – 4 (7-22mm P8)	45%	79%	91%
4 – 5 (23mm + P8)	42%	96%	100%



Figure 1: Fat score 3 cow with 11mm on the P8 site (Image courtesy of Brett Littler)

While cow condition at calving is important, **nutrition during early lactation is considered to be most important**. Research shows that cows that calve down in suboptimal condition can still achieve good conception rates provided they receive good nutrition between calving and joining. Experimental trials with first calvers in low body condition score, fed to achieve moderate weight gain of 0 - 0.2kg/day, achieved reasonable pregnancy rates (as shown in the table below). This research also highlights that good body condition at calving doesn't guarantee success - you still need to provide adequate nutrition.

Table 2: Relationship between body condition at calving and pre-mating nutrition on conception rates in first calf heifers

Body condition at calving	Premating nutrition	Pregnancy rate
High	High	97%
High	Low	69%
Low	Low	47%
Low	High	86%

Source: NSW Agriculture

Looking at the current pasture conditions across the region, if cows are below target body condition at calving, and/or maiden heifers are not gaining appropriately, supplementary feeding will be needed to achieve acceptable fertility levels at joining. With the very high nutritional requirement for lactating cows it's important to use high quality supplements that contain high levels of energy (and protein) such as grain, pellets and good quality hay and silage. Remember a lactating cow that is also growing (i.e. a 2 year old first-calver) will need almost double the amount of energy, and almost three times the amount of protein per day, compared to a dry cow.

It's important to note that supplementary feeding of lactating cows can have multiple benefits. It not only directly benefits the calf at foot through improved milk production, but it also prevents excessive weight loss of the cow and thereby increases her ability to get back in calf. The amount of supplement required

will be dependent on the quantity and quality of pasture available, but even modest amounts of supplement can have a big impact on cow and calf performance.

If you need assistance with deciding what and how much to feed, Local Land Services is happy to help. We are also available to discuss other topics around optimising fertility such as early weaning, temporary weaning, vaccination, supplements and hormone synchronising.

Find contact information for your local office here <https://southeast.ils.nsw.gov.au/our-region/contact-us>

MANAGING CALF SCOURS

Evelyn Walker District Veterinarian South Coast

I have been seeing increasing cases of calf scours in un-weaned cattle going into winter this year. Scours in young calves are generally due to nutritional issues, infectious causes or a combination of the two. Although calves are more vulnerable to disease **you can improve calf immunity by: ensuring good colostrum transfer, providing adequate and appropriate nutrition, providing a clean environment and providing protection from inclement weather.**

Closely supervise calves to ensure they are getting a decent drink (minimum of 2 litres) from mum both within the first hour of birth *and* over the next 12 hours. During this time is when colostrum uptake is essential to ensure good immunity is passed from mum to calf. If in doubt, be prepared to provide colostrum from alternative sources, either from other freshly calved cows or commercial made.

Given that pasture feed is in short supply and non-existent in some areas, cattle producers have resorted to hand feeding with available forage, silage and grains earlier than they normally would.

It can take up to three months for a calf's rumen to fully develop with enough rumen bugs. These rumen bugs (a mixture of bacteria, fungi and protozoa) do the job of digestion and the making of protein and volatile fatty acids (energy). So when we feed, we are aiming to meet the nutritional demands of both the rumen bugs and the calf. **Ensure any feed provided to calves is either a high quality pellet or a grain and protein mix specifically designed for calves. Providing high quality roughage that calves will readily consume is paramount to foster rumen development and keep the digestive processes working.** In addition to adequate nutrition, avoid sudden changes in diet. Any new feeds should have a minimum transition and introductory period over 7 to 10 days to avoid digestive upsets.

Management practices designed to minimise contact with potentially contaminated environments will assist in rearing healthy calves. Calves are at greater risk if there is crowding of animals and particularly where there is close contact with other infected animals and reduced hygiene practices. Areas where communal feeding is practiced can be a potential source of contamination because of close contact with faeces, as infectious agents can be shed in faeces and other bodily fluids. For this reason, avoid feeding on the ground and institute regular cleaning and sanitising of feed and water troughs, bottles and enclosures etc. Rotate communal feeding sites to avoid build up manure in one concentrated spot.

Although it might be difficult if you have a smaller property, have plans in place for a designated "calving paddock" that has been rotated and/or spelled and a "hospital paddock." Many of the pathogens that calves are susceptible to can be potentially picked up from the calving environment at the time of the birth (and not necessarily affect mum). To minimise potential spread of disease, it is

essential that any sick or scouring calves are identified immediately and isolated from the herd in a designated “hospital paddock” or “sick bay pen” where they can be monitored and treated individually. Maintaining hygiene is critical when handling sick animals or going thru sick bay pens by washing hands, disinfecting boots, removing faeces, soiled material, etc.

Preventative measures like use of a scours vaccine may be beneficial depending on the individual farm. There are a number of commercial scours vaccines available to help protect young calves against common bacterial (*E. coli*, *C. prefringens*) and viral (Rotavirus, Coronavirus) pathogens. Bear in mind that these vaccines will not prevent scours caused by other types of bacteria, viruses or protozoa and that vaccination is used as part of a whole herd management program. Vaccination is not a substitute for good management practices.

If you are concerned that scours are spreading throughout your herd, affected calves are deteriorating rapidly and un-responsive to administered supportive therapies such as electrolytes and/or drenches, or preventative measures, you should contact your nearest veterinarian for advice.

MYCOPLASMA OVIS

Fiona Kelk District Veterinarian Yass

Mycoplasma ovis (*M.ovis*) is a bacterial infection of sheep and goats which causes the disease formerly known as Eperythrozoonosis. *M. ovis* infects the red blood cells of the animals, prompting the spleen to attempt to clear the infection by destroying the diseased blood cells. It is this excessive destruction of the blood that **leads to anaemia, jaundice and death**. Disease outbreaks can last for 14 to 28 days.

Clinical signs include:

- ill-thrift
- anaemia (pale gums)
- jaundice (yellow gums)
- dark red urine
- death (particularly following a stress event such as mustering/yarding).

M. Ovis has been seen in sheep of all ages from 4 weeks upwards, while sheep of all ages can be affected it is an **important disease of weaner sheep**. It is important to note that not all infected sheep will show signs of the disease and that symptoms of anaemia and ill thrift may be caused by other diseases such as worms or fluke.

The effect of M. ovis is more severe if sheep are stressed by other conditions such as internal parasites or malnutrition. Deaths may occur in severely affected young sheep, especially if they are stressed by yarding. Losses of up to 30% of the flock have occurred in these circumstances. For this reason it is important to seek advice from your veterinarian and **obtain a diagnosis if you suspect ill-thrift** in a mob of lambs or weaners before you yard or handle them.

The immune system of most sheep will effectively fight off the infection if nutrition is adequate, while other animals will not completely eliminate the organism and will keep it at such a low level that it does not cause disease. Such animals may stay infected for life. These ‘carrier’ animals are the most likely source of infection for other sheep. A reservoir of infection is probably maintained in breeding ewes. Flock prevalence in Southern Australia is thought to be as high as 90%. Merinos are more commonly affected than other breeds.

***M. ovis* is spread by the transfer of infected red blood cells** from one animal to another. Most commonly outbreaks occur 4–6 weeks after **marking, mulesing, crutching or shearing**. Insect vectors such as bloodsucking insects (e.g. mosquitoes and midges) and flies on wounds, can also spread the disease. Ensure hygienic practices at lamb marking to minimise transfer of blood from one animal to another, this includes ensuring that mulesing shears and tail marking apparatus are soaked in an **effective disinfectant** between lambs.

Many contractors use two sets of shears so that one can be soaking while utilising the other, swapping after each lamb.

If your flock or herd is suffering losses with anaemia and you have ruled out worms and fluke by conducting egg counts, seek veterinary advice.

Contact Us

South East Local Land Services

District Veterinarians

Far South Coast

Mark Doyle

02 6491 7800

Goulburn

Henry Clutterbuck

02 4824 1900

Monaro

Petrea Wait

02 6452 1455

Palerang

Lou Baskind

02 4842 2594

South Coast

Evelyn Walker

02 4464 6000

Yass

Alex Stephens and Fiona Kelk

02 6118 7700