SOUTH EAST COUNTRY VETS

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GUIDELINE TO SHEEP & GOAT MANAGEMENT

Regardless of whether you have two or two hundred head, it is important to keep on top of all things that are required to ensure their health and welfare are maintained.

BREEDING

Nutrition is very important and ewes/nanny's should be in condition score 3-3.5/5 at joining and preferably around 12-18m of age depending on breed and production system. The gestation period for ewes and goats is approximately five months. During the first three months of pregnancy, feed requirements are similar to dry ewes/nannies. In the last two months however requirements will be 2-2.5 times that of a dry ewe/nanny so this needs to be considered and supplied.

LAMB/KID MARKING

Marking should be carried out at ~6wks of age. Procedures that need to be done include ear tagging, castrating, tail docking (sheep only) and vaccinations.

VACCINATIONS

Primary Producers can prevent losses from certain diseases by using a planned vaccination program. For those diseases that occur each year such as clostridial diseases, vaccinations are required routinely. Vaccination stimulates the body's defence to build immunity to a particular disease. Ultravac 5in1 vaccination against clostridial diseases is essential in all sheep and goats.

1st dose: done at marking or as soon as available

2nd dose: done 4-6wks later

Booster: 12m later then annually (prior to lambing/kidding for females)

Depending on your production system, vaccinating against Scabby Mouth, Ovine Johne's Disease or combining vaccinations with a worming injection may be required. Speak to your vet for further advice.

INTERNAL PARASITES

We live in a summer rainfall area, which puts sheep and goats in this area at particular risk of barber's pole worms. There is seasonal variation in its severity, but in wet years significant losses can occur either by mortality/death, or by loss of production/lower weight and wool gains.

Unfortunately, resistance to the drugs used to control worms in sheep and goats can be a significant problem, and in order to ensure we have a good range of effective drenches available in the future it is essential to take a "holistic" view in controlling worms.

Worms affecting sheep and goats

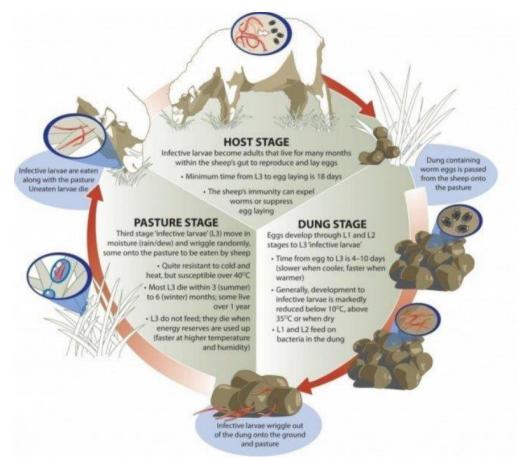
Barbers' pole worm (hemonchus contortus) is by far the most significant worm in our area. It can cause sudden death, pale gums/anaemia, bottle jaw, lethargy/lagging behind. It rarely causes scouring

Black scour worm (trichostrongylus) can also occur in our area, and can cause death, lethargy and collapse, weight loss, damage and inflammation of the gut resulting in diarrhoea (scouring), hypersensitivity of the gut resulting in diarrhoea (scouring).

There are numerous other worms that can affect sheep but not all are significant in this area. They include small brown stomach worm, other round worms, tapeworm, and liver fluke

Goats: Higher Susceptibility to Worm Burdens

Goats differ significantly from sheep when it comes to managing internal parasites. Unlike sheep, goats do not develop age-related immunity to worms. This lack of natural defense makes them much more susceptible to worm burdens throughout their lives, requiring more vigilant management practices to prevent health issues and production losses.



Important points

Image: The roundworm life cycle (Source: Sheep CRC)

- Roundworms flourish in warm wet conditions. The lifecycle in ideal conditions for barber's pole worm can be as short as 18 days (from eggs being passed in faeces to reinfection to the sheep/goat).
- Worms cannot complete their life cycle if under 10 degrees or over 35 degrees.
- It may take 6 months for all worm eggs and larvae to die in a "rested" paddock. This may be shorter if extended periods of cold, dry or heat.
- It can take 3-4 days for all worm eggs to be passed from the gut after drenching
- Most worm larvae will be close to the ground i.e. in the lowest 10cm of pasture

Pasture management

This is EXTREMELY important in reducing the parasite load on your sheep and goats. Having several paddocks to rotate through can significantly decrease the worm burden in your flock. The length of time spent in each paddock will vary with time of year, type of stock (lambing ewes/weaners, adult sheep), and number of paddocks. More information can be found on the wormboss.com.au website.

If you have cattle as well as sheep/goats, alternating grazing with cattle can significantly decrease the worm larvae load on the pasture. Ensuring pastures aren't grazed too short in warm wet summers can reduce ingestion of larvae. IT IS VERY IMPORTANT to lamb and wean onto "clean" paddocks, following a strategic drench.

Faecal egg counts/FAMACHA scoring

Drench resistance in worms can be a big issue, resulting over time in drenches not being effective. To reduce this occurring, regular faecal egg counts (faecal floats) can be used to see whether your sheep or goats need worming, rather than blanket treating all of them. South East Country Vets can provide this service in-house, however the samples can be sent to the DPI or external labs to obtain a more quantitative result.

FAMACHA scoring – this is a colour chart score to assess the severity of anaemia /blood loss caused by barber's pole worm (only). Different sheep in the flock will not have the same number of worms – this is a test to see which individuals in the flock need to be treated. It is quite labour intensive so not suitable for large numbers but can drastically reduce the amount of drench used.

https://www.mla.com.au/news-and-events/industry-news/archived/2016/applying-famacha-for-effective-wormcontrol/

Drenching- when and with what?

The number and type of drenches required in a year will vary depending on pasture management, season, class of stock and other management practices. In our summer rainfall area warm wet seasons are going to have much higher worm burdens than drier years.

There are certain times of year that a drench will be required no matter the season:

Lambing ewes: up to and after lambing, a ewe's immunity to a worm burden will dramatically decrease – i.e. they are much more likely to get sick from having worms. It is important to drench PRIOR to lambing, and drench onto a CLEAN PADDOCK – i.e. one that has been rested for long enough that the worm burden on the pasture is minimal. This may be up to 6 months without sheep in a warm wet year.

<u>Weaning</u>: during weaning a lamb/kid's immunity will be reduced as for a lambing ewe. Likewise, it is important to drench and wean onto a CLEAN PADDOCK as above.

<u>Other times</u>: if you are not able to rotate pastures well, you may need to drench routinely every 12 weeks. In high worm burden areas this may still not be enough – remember it will take 3 weeks for barbers pole worms to mature from egg in optimum conditions. This means that if you are not careful you may have very sick sheep or goats 4 weeks after drenching! Consult your veterinarian if you have any unwell sheep and they may recommend more frequent dosing or different products.

What drench do I use?

There is a large problem with RESISTANCE TO DRENCHES – i.e. worms develop an immunity to certain ingredients in drenches and they may not be effective. For large numbers of sheep it is strongly recommended to do DRENCH RESISTANCE TESTING – more information can be found on the wormboss website. This allows you to find out which drenches are going to work for your property.

For small numbers of sheep or where this is not possible, using a multi active drench - that has at least 3 different classes of drench - is recommended, to give the best chance of the drench killing the most worms. These tend to be short acting drenches, so will kill the worms present in the sheep but wont have any long term effect. E.g. Q-drench, tridectin, or using several drenches at the same time.

Long-acting drenches, such as injectable, or rumen boluses, can be great for high risk times e.g. ewes about to lamb – but may be more likely to develop resistance if not used correctly. They need to be combined with a "tail cutter" drench as they are getting to the end of their effective period, to ensure any resistant worms have been killed. Examples of these are injectable moxidectin.

Other methods of reducing worms and drench requirements

Genetic selection - there is a high heritability for resistance to worms. Rams have ASBV's for worm egg counts, so you can make a big difference to how much you need to drench and reduce losses through reduced weight gains etc overtime.

Barbervax - There is also a vaccine for barber's pole worm – to increase your flock's immunity to barber's pole. It is not a long-lasting vaccine so would need to be used in a holistic program combined with other methods, but can reduce the amount of drench used

Holistic Approach

Considering holistic products such as **BioWorma®**, which is consumed by goats or sheep and excreted in their manure. This product targets and "strangles" the L3 larvae stage of worms on pasture, reducing reinfection rates. It can be a particularly handy option for hobby farmers with limited paddocks.

Are goats the same as sheep?

There are not very many drenches registered for use in goats – this means they may need to be used "off label" and do not have labelled meat and milk withhold periods.

GOATS OFTEN REQUIRE A HIGHER DOSE of drench than sheep do – it is best to contact the clinic for more information on dose rates for goats.

More Information

There are some excellent resources online that can help with a holistic approach to parasite control in sheep and goats. Some are below:

<u>http://www.paraboss.com.au</u> – an excellent resource for more information, with tailored programs and recommendations

https://www.dpi.nsw.gov.au/ data/assets/pdf_file/0009/111060/Drench-resistance-and-sheep-worm-control.pdf

https://au.virbac.com/products/sheep-worms

https://www.mla.com.au/news-and-events/industry-news/archived/2016/applying-famacha-for-effective-wormcontrol/

EXTERNAL PARASITES

Lice are small wingless insects that feed either by biting or sucking blood from the affected animal. They hatch and grow near the skin and base of the fleece and thrive in cooler climates. Signs of infestation include the animal rubbing or biting at the skin. If you notice this, treatment with a topical pour on or spray is required.

Flies tend to be a bigger problem in sheep that are not mulsed as they have hair that gets wet with urine and faeces creating the perfect environment for the fly lifecycle. Major fly activity occurs around the warmer moist months of the year. In severe cases, fly strike will cause discolouration of the wool and irritation. The affected sheep may lose weight, develop a fever and lose their appetite resulting in reduced production.

Sheep and goat tick prevention

Please contact the clinic to discuss options.

