

Sheep and Goat Health on the North Coast

There has been a trend toward keeping sheep and goats on the north coast. Sheep are used mainly as grass eaters in orchards and plantations and on small holdings. Goats are being kept for milking on both commercial and small holdings and as companion animals. Sheep and goats originate from hot dry regions and the wet subtropical climate of the north coast presents a few challenges.

Not all conditions in sheep and goats are preventable. However many are. With some other problems the damage can be minimised by strategies. This brochure focuses on the common preventable diseases and problems of sheep and goats in the area serviced by the North Coast Livestock Health and Pest Authority. For further advice speak with one of our District Veterinarians.

What breed should I run?

Unless self shedding sheep such as the Dorper or Wiltshire Horn are run, sheep will need to be shorn once a year and on the coast shearers are difficult to find. Both these are good meat breeds. Home spinners running coloured sheep of course will need to shear. Of the goat milk breeds, the Saanen is popular, but the Anglo Nubian and British Alpine and Toggenburg are also kept. The Boer is the most popular meat goat.

Worms

Barbers Pole Worm (*Haemonchus contortus*) is the number one killer of sheep and goats on the north coast. It has proved over the years to be one of the most difficult problems to treat. Barbers Pole lives in the fourth stomach and feeds on blood. The signs it produces are anaemia (pale gums), weight loss and bottle jaw. The faeces are dark and dry and not moist like other worms. It prefers wet, hot conditions. Typically disease is seen in the late summer and autumn months. It is a heavy egg layer, with a short life cycle and contaminates pasture to high levels quite quickly. Prevention therefore relies on reducing pasture contamination and worm pick up;

- Pasture management to ensure that feed is not grazed too low.
- Do not set stock in the one paddock; unfortunately this is common practice. Instead have several paddocks that sheep or goats can rotate between.
- Cattle are not infected with this worm, so alternate grazing with cattle reduces pick up.
- As an alternative to cattle, slash or mow between grazings. This exposes the worm to drying out, reduces pick up and improves feed quality.
- If house overnight to protect against dog attack, use mesh or slats to minimise pick up of worms off the ground. Overnight feed should be off the ground in troughs or racks.
- Reduce reliance on pasture and improve nutrition through supplementary feeding.
- Focus drenching in late spring and early summer to minimise pasture contamination and prevent build up of worm numbers early in the worms' season.
- Don't leave drenching to late summer and autumn when they are already wormy.
- Faecal monitoring during summer and autumn helps to ensure that pick up has not been high and that your drenches and program are working. Traditionally this has been done by faecal egg counts, but a new *Haemoncus Dipstick Test*[®] is now available.

Good general nutrition is important for a strong immune system and resilience against worms. A program must not rely on drenching alone. Because of its ability to recontaminate pasture very quickly, drenching frequently in the face of high pasture contamination is doomed to fail. Resistance has now developed to most if not all the drench groups. Drenching frequently only hastens this.

Black Scour Worm (*Trichostrongylus*) can cause scouring and illthrift in the late autumn and winter months. It tends to strike younger animals whereas Barbers Pole affects sheep and goats of any age. The grazing principles for control are as for Barbers Pole. If Black Scour Worm is a problem, drench prior to the expected onset in late autumn, with a follow up drench if conditions are damp in winter.

Coccidiosis is common in young goats and sometimes lambs. It is seen when the stocking rate is high or from eating spilled feed off the ground. Another reason for having slats or mesh in the night pen. Signs range from acute diarrhoea to illthrift. If continues to be a problem after the grazing strategies for worms are attempted, then products called coccidiostats are used to treat and prevent.

Dog Attack

Historically this ranks as a major cause of sheep and goat mortalities in the district. Dog attacks are of two types; wild dogs and straying domestic. In flocks on small holdings night pens or sheds are an option to prevent attacks at night. Electric fencing can be very effective in keeping dogs out. Guard animals are an option with larger flocks; dogs such as Maremma and alpaca have been used. However note that Alpaca themselves become victims of dog attack and barbers pole worm. Also guard dogs can become a nuisance or sometimes aggressive unless correctly trained. The authority's Rangers are able to offer advice and baits if appropriate, to control wild dogs.

Paralysis Ticks

Because of their low body weight sheep and goats, particularly lambs and kids, are very susceptible to tick paralysis. Ticks are most active in the second half of the year from July to December. Paralysis ticks tend to be in greater numbers where there is cover for native hosts, such as bandicoots. In and near blady grass and scrubby gullies are worst and should be avoided. Several overspray chemicals are available, but these need to be applied every 7-10 days to be affective.

Sheep Lice

Sheep lice can build up to very high levels on sheep, causing irritation and fleece problems. No level of lice should be tolerated. There are legal obligations to ensure that infected sheep are not sold. A variety of products are available. Seek advice from one of our DV's if sheep are seen to be rubbing.

Lameness

It is important to contact an authority DV if your sheep or goats are lame as the causes can look similar, but the treatments are different. Also in NSW owners are required by law to report footrot.

- **Foot Abscess** is a problem in wet seasons, particular with pregnant sheep and goats. The affected feet are swollen and too painful to put to the ground. If the front feet they may graze on their knees. Some breeds with harder feet seem to be more resistant.
- **Footrot** is caused by a specific bacteria which can only be introduced onto your property in the feet of infected sheep or goats. It attacks the web between the digits and then causes underrunning of the sole of the hoof. Through notification and a cooperative effort with landholders footrot has been very successfully controlled in NSW.
- **Scald** is an infection of the web between the digits, but does not have the underrunning of the sole as seen in footrot. It is seen when the feet are constantly damp, but unlike footrot, scald clears when conditions turn dry.
- **Overgrown hooves** can be a result of poor conformation or from constantly being on soft ground or from any of the above diseases.

Feet Trimming is a necessary part of treating foot abscess, footrot and overgrown hooves. By having a gravel lead up to the night pen and in gateways will help. Goats love to climb and a pile of large rock in the paddocks will satisfy this desire and help to keep hooves short.

Diseases Preventable by Vaccination

- **Enterotoxaemia (Pulpy Kidney)** can cause deaths in sheep and goats, particularly if on lush feed or supplementary fed. Prevention is by 5in1 vaccination, 4 to 6 weeks apart. In high risk situations (as is typically seen on north coast) boosters should be given every 6 months.
- **Tetanus** – infection occurs through penetrating wounds. The 5in1 program for Pulpy Kidney is more than adequate for tetanus protection.

- **Caseous Lymphadenitis** (CLA or Cheesy Gland) a common abscess in both sheep and goats. Preventable by 3in1 or 6in1 (covers tetanus and Pulpy Kidney as well). Note that goats can have a life threatening adverse reaction to 3in1 and 6in1 and should be used with caution.

Caprine Arthritis Encephalitis (CAE or Big Knee) is a viral disease of goats that causes arthritis and other signs. It is common dairy goats. A blood test is used to confirm the disease and can be used to eradicate the virus from a flock. The authority's District Veterinarians are able to assist in a program.

Mineral Supplementation Much of the north coast is deficient for both Copper and Selenium. However some advice and supplements have grossly overstated the amount required, particularly for copper. Copper poisoning is far more common than copper deficiency, particularly in British breeds of sheep. Before supplementing, seek advice from one of the authority's DV's.

Poisonous Plants

The plants that sheep and goats are poisoned tend to differ from cattle, their grazing preferences are different and in some cases they are more resistant. Because they watch each other graze and mimic each other often a large number can be poisoned at one time. For this reason it is important to identify the cause quickly and remove them from the source. A wide variety of species are known to be toxic, but the two most common plants responsible for poisoning on the north coast are;



Green Cestrum (*Cestrum parqui*) is an introduced garden plant and a declared weed. It is a shrub with clusters of yellow flowers in winter. Causes acute liver failure and sudden death. There are other species of *Cestrum*, including *Cestrum nocturnum* (Night- Scented Jasmine). All are toxic.



Poison Peach (*Trema aspera*); a pioneer rainforest shrub to small tree that is highly toxic. It has a powerful liver toxin and causes sudden death.

Do not tolerate any of these two species where sheep or goats are grazed.

Movement Requirements

There are movement requirements by law for sheep and goats moving both into and within NSW. These cover identification, disease and documentation. Contact the authority or download from;

http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0009/278559/Moving-sheep-into-and-within-NSW.pdf

http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0016/301660/Moving-goats---Primefact-949.pdf

Protect Your Flock

Diseases and problems can be introduced into through buying sheep and goats. Getting rid of them can be expensive. If starting out or buying more stock it is wise to reduce the risks.

- Ovine Johne's Disease; only buy from low risk areas and flocks. Buy from an accredited flock. Make enquiries with District Veterinarian in the LHPA of origin.
- CAE in goats; buy from an accredited herd or test before introduction.
- Lice; preferably buy sheep in short wool and always treat on arrival.
- Footrot; inspect feet closely before purchase. Ask for a vendor declaration. Our animal health team are available for assistance if uncertain.
- Vaccination; check with vendor. If in doubt, vaccinate on arrival and again in 4 to 6 weeks.
- Resistant worms; treat on arrival with a product that contains at least 3 drench groups and hold in the yards (or night pen) on feed and water for at least 72 hours.

Some Useful Websites:

<http://www.dpi.nsw.gov.au/agriculture/livestock/goats>

<http://www.dpi.nsw.gov.au/agriculture/livestock/sheep>

<http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/management/general/guard-animals>

<http://www.mla.com.au/AudienceHierarchy/Goatproducers/default.htm>

<http://www.mla.com.au/AudienceHierarchy/Sheepproducers/default.htm>

http://www.animalhealthaustralia.com.au/programs/jd/goat-health/goat-health_home.cfm

<http://www.farmbiosecurity.com.au/>

<http://www.wiltshirehorn.asn.au/web/>

<http://www.dorper.com.au/cms/pages/breed-information.php>

<http://www.australianboergoat.com.au/>

What we do?

- The District Veterinarians and Rangers of the North Coast LHPA are the region's frontline field service for the NSW Government's Animal Health System.
- The team's activities are defined by legislation and aim to protect and enhance human health, market access, livestock production, the environment and animal welfare.
- Our activities are essential to make sure we have markets to sell our stock to and ensure that livestock and their products are safe to use.
- We are also prepared for any emergency disease outbreaks such as Foot and Mouth Disease.
- The team often has a presence at saleyards, field days, shows and schools.
- Our Rangers provide a service to control wild dogs, foxes, wild pigs and rabbits. They also issue certificates for stock movements and provide advice on livestock identification.
- Our District Veterinarians are available to provide a free diagnostic service for significant livestock disease. However they do not provide treatments for animals or do activities normally done by private veterinarians.
- We also provide advice on any livestock health matters. Information on regional disease trends is released by the LHPA through press releases and through livestock health news.
- If you would like to receive livestock health news from the North Coast LHPA by email simply send an email address to matthew.ball@lhpa.org.au.
LHPA is always interested to hear what you have to say about livestock disease.