

Livestock health matters

Prepared for landholders by the veterinary staff of the South East LHPA

Footrot problems prevalent

The wet seasonal conditions experienced over the summer and autumn have caused a resurgence of foot problems in sheep and goats not seen for many years. Although we believe that we may not have virulent footrot within the South East LHPA, there is a flock in the Bemboka area that is currently subject to investigation. Sheep introduced from Victoria, as in this case, pose a special risk, as footrot is still common in that state. The prevailing conditions have allowed unrecognised footrot infections to reappear and spread.

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LHPA vets warn of lead poisoning risk - see page 3.



Survey sheds light on hydatid risk

Recently, Dr David Jenkins from Charles Sturt School of Vet Science at Wagga Wagga invited Braidwood district vet Bob Templeton to take part in a survey looking for both hydatid and *Taenia ovis* eggs in faeces of dogs that had been exposed to livestock.

Hydatid disease is caused by a tapeworm (*Echinococcus granulosus*) which infects domestic and wild dogs, and rarely, foxes. *Taenia ovis*, another tapeworm of dogs, is responsible for the cystic stage of sheep measles (*Cysticercus ovis*).

Hydatid tapeworms gain access to the dog's intestine when they consume the tapeworm heads contained in cysts or cyst fluid. The most common source of transmission to dogs is through dogs eating sheep offal.

Thousands can inhabit and grow in the dog's intestine without causing any ill effects; eggs are then shed within a tapeworm segment expelled in faeces. Once shed, the eggs can remain viable for several months in the kennel area, pastures and on a dog's coat.

Eggs will only continue their life cycle once ingested by a susceptible host for example, sheep, pigs, goats, deer, cattle,

kangaroos, wallabies, wombats, horses and humans.

In conducting the survey in the Braidwood district, nearly all the farmers contacted were eager to be involved as many of them either had experienced a hydatid infection themselves or knew of an affected relative or friend. These producers were keen to assess the risk posed to them by hydatids. Seventeen producers supplied 65 dog faecal samples for the survey and it is pleasing to report that no evidence of hydatid or *Taenia ovis* eggs were found in this relatively small sample.

Some cysts commonly found in rabbits and hares are often mistakenly identified as hydatid cysts. These cysts are those of other tapeworms, *Taenia serialis* and *T. pisiformis*. These cysts arise from pasture contamination from fox faeces as part of a wildlife infection cycle.

The disease in animals is costly as affected offal is downgraded or condemned at the cost of the producer. While dangerous to health and costly to the livestock industry, over the last decade the prevalence of hydatids reported in livestock killed at abattoirs has fortunately been declining.

The NSW Sheep Health Monitoring

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For more information about a topic in this newsletter or for livestock health advice contact your local South East LHPA district veterinarian:

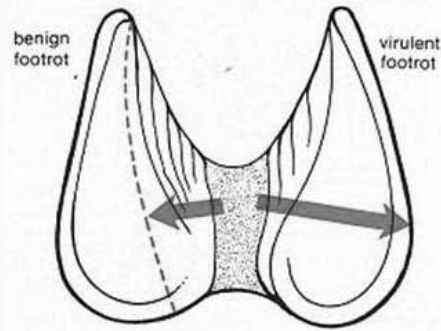
Ian Lugton, Bega (02) 6492 1283, Chris Haylock, Bombala (02) 6458 3055, Bob Templeton, Braidwood (02) 4842 2536, Brian Hodge, Cooma (02) 6452 1122.

Footrot problems prevalent

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Footrot is an infectious problem spread from one sheep to the next via the ground. If conditions are right and the disease is active, it is possible to infect all sheep in nearly every foot, independent of the age or weight of the sheep. The toes do not swell, and to diagnose footrot the skin between the claws needs to be examined. The two bacteria involved rot the skin between the claws and produce a rather distinctive pongy cheese smell. In benign footrot cases, the damage will be limited to the interdigital skin and a small amount of horn tissue of the adjacent sole. Only a portion of the sheep will be affected and often in only one or two feet. There will be some lameness noticed as the tissues between the claws can become quite raw and bleed a little. This condition can be adequately controlled by footbathing with copper or zinc-based treatments.

However, with virulent footrot, a very high proportion of feet and sheep may be affected. The bacteria will eat away at the horn of the sole and erode and underrun this to the outside wall of the claw and beyond. In advanced cases the claw may become long and deformed and infested with maggots within a black tarry matrix. Many sheep will have difficulty walking and may resort to eating while resting on their knees.



Left: the underside of a sheep's foot showing the usual limits of sole underrun associated with benign and virulent footrot.

Virulent footrot, because of its highly infectious nature, production losses and severe effects on sheep and goats is a notifiable disease. If you think that you may have this disease and haven't notified a district vet or ranger of your suspicions, you risk being fined. If you think a neighbour has the disease and you do nothing, it will probably end up transferred to your holding by strays. We need to know if it is present, so its spread can be controlled. Don't hesitate to notify if you think the disease is in your flock or is nearby.

Further information on foot diseases of sheep can be found at: <http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/health>.

Strategies to prevent Barber's Pole Worm

Barber's Pole Worm and many other scour worms are likely to have accumulated within sheep this autumn. It is strongly recommended that faecal worm egg counts are undertaken to detect heavy infestations which may seriously affect the productivity of all small ruminants and lead to deaths during the winter, spring and summer.

Viable Barber's Pole Worm eggs and larvae in the environment will steadily decline during the winter, but they do survive winter frosts. Good control can be achieved by reducing contamination of pastures in the autumn, thereby delaying the build up next summer. These worms should be removed by an effective drench during March or April. If you have missed this opportunity, drench as soon as possible. Barber's Pole Worm love set stocking, where sheep are held in the one paddock all the time. Avoid this

by rotational grazing and using the sheep to follow cattle grazing where your fencing allows this possibility. An early summer drench next season may also be required to limit the build up of Barber's Pole Worm as conditions warm. Check the need with a faecal egg count first.

Due to widespread resistance to the older drench classes, it is not likely that using a cheap single active drench, such as just a white, clear or ivermectin will remove all worms. Combinations of these are far more likely to be effective at removing the range of worms affecting sheep now. Newer broad spectrum drugs or more powerful actives such as monepantel (Zolvix®) and moxidectin (Cydectin®) are also likely to be effective.

During the next warm season spread period, it may be better to rotate drench usage and employ narrow-spectrum drenches

to ensure that any problems are nipped in the bud. These narrow-spectrum drenches contain actives such as closantel (eg Seponver®, Closicare®, Sustain®), naphthalophos (Rametin® and Combat®) and nitroxynil (Trodax®). Both nitroxynil and closantel also kill adult liver fluke and so are best used as a spring drench around the time of the last frosts.

DISCLAIMER

The discussion of an animal health product within this newsletter should not be taken as a specific endorsement for such a product. Mention of these products or their uses is for information purposes and to draw attention to their existence in the marketplace.

For information about looking out for Barber's Pole Worm, see page 4.

Survey sheds light on hydatids risk

From page 1

Program conducted through Goulburn, Dubbo and Wallangarra abattoirs found that two per cent of direct consignment lines are found to have hydatid cysts, with very few of these coming from the South East LHPA. Although few sheep from the south coast area are slaughtered at Goulburn, we know that occasional hydatid cysts, usually degenerate and calcified, are found in livers of cattle from the coast.

Control involves preventing contamination of your property with tapeworm eggs by:

- controlling dog movements;
- feeding only manufactured dog foods;
- preventing dog access to dead stock or fresh offal, including that from wildlife;

- treating your dogs every 4 to 6 weeks with a wormer containing praziquantel; and
- controlling what contamination visitor's dogs leave on your property. Remember to insist that casual farm worker's dogs are treated and then tied up for 3 days with droppings collected and disposed off safely.

Amongst humans, children are at greatest risk of hydatid infection as they generally have a casual approach to hygiene. Infection in humans requires surgery for treatment and deaths from hydatid disease still occur both before and after surgery. Remember to wash your hands and children's hands after handling dogs and before eating.

LHPA vets warn landholders of lead poisoning

Good seasons bring as many problems as droughts. With fantastic feed on offer on the Southern Monaro late last year, you would have expected a mob of steers to thrive. Instead, once they had their fill of pasture, they went nosing around the sheds only to uncover and break open an old battery. Cattle are the most at risk of lead poisoning because they are inquisitive and will taste novel items. Lead salts, being sweet, are often attractive and will be eaten.

In this case the owner noticed that one steer was behaving oddly and the he became suspicious of lead poisoning. Cattle often bellow, stagger, appear blind and head press when affected acutely by lead poisoning. Damage to the brain is the cause of the signs. A dead steer was later found in the paddock and samples of kidney confirmed lead poisoning.

Of 90 steers in the affected mob, two died and another two were affected. But the problems didn't stop there. Because lead is toxic for humans, the rest of the mob had to be tested for lead levels. Until blood tests could show which animals had sampled the battery,

the whole mob were detained to prevent contaminated food from being marketed.

Blood samples had to be collected within six weeks. Testing showed that eight survivors had lead levels too high for human consumption. Those steers must now be kept for 12 months and retested, but the other 80 which didn't apparently chew at the battery, are safe to be marketed.

The vast majority of lead poisoning cases in NSW are caused by old lead-acid batteries. Battery cases become brittle over time and can easily be broken open. If you have any old batteries lying around, why not cash them in with a scrap metal dealer and remove the risk? Other sources of lead that sometimes cause problems include:

- Machinery, buildings, yards and equipment painted with lead-containing paints, industrial paint tins;
- Ashes left after burning painted materials;
- Linoleum;
- Sump oil, automotive grease

and oil filters;

- Silage contaminated with lead shot;
- Putty and caulking compounds;
- Leadlight windows.

A careful trip around every property should be conducted to look for poisoning risks. A useful reference is the Livestock Production Assurance guideline "On farm risk assessment for persistent chemicals" available at the MLA website: www.mla.com.au.



DV Ian Lugton taking a tail blood sample to test cattle for lead poisoning.

Looking for Barber's Pole Worm

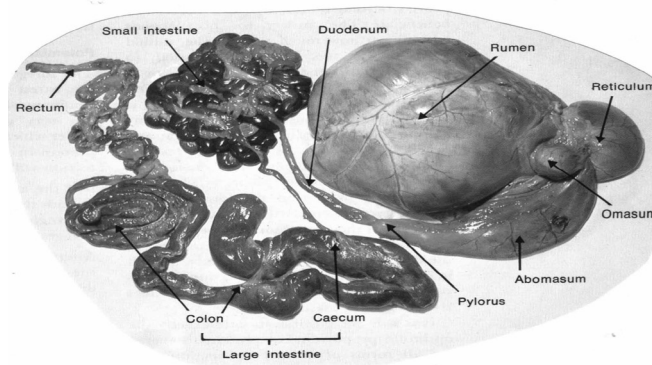
Barber's Pole Worm (*Haemonchus contortus*) is a blood sucking worm that causes blood and protein loss and anaemia in sheep and goats. Affected stock show pale mucous membranes, and may develop 'bottle jaw'. This is caused by an accumulation of fluid under the jaw and around the lips.

Infection occurs from stock consuming infective worm larvae on pasture. These mature into adult worms in the abomasum. The life cycle continues with masses of eggs being shed onto the pasture within faeces.

Treatment involves using an effective drench and moving treated sheep onto safe pastures as the protective period of the drench expires. Warm and moist conditions tend to be the most conducive for Barber's Pole Worm infestations and this summer/autumn just passed has been a ripper of a season for Barber's Pole Worm-associated deaths and detections on properties where this infection is not normally troublesome.

Offices of the South East LHPA have a do it yourself guide to conducting an autopsy to find Barber's Pole Worm. Of the sheep worms, they are relatively easy to

identify and if killing sheep they will be present in their hundreds and thousands.



Above: sheep gut dissected to show the location of the abomasum where Barber's Pole Worms may be found.

Benign Theileriosis now more common

Theileria are a blood parasite, similar to those causing the tick fevers associated with cattle ticks in Queensland.

Since 2005, especially in the Hunter and Northern Coastal areas, many cattle have died as a result of sporadic outbreaks of Theileriosis. However, recently, cases have occurred in the tablelands and on the slopes. Affected animals appear lethargic, depressed and weak. Many will dry-off and some will die.

This infection is now affecting animals more seriously. This is believed to have occurred following introduction of the more pathogenic 'Ikeda' strain, which causes disease in Japan. Although this strain causes some deaths, the local disease is still termed 'benign' to differentiate it from an exotic variant causing East Coast Fever in Africa.

There are increasingly more cases of Theileriosis occurring on the south

coast in recent months. Many cases involve the movement of naïve stock into an area where the Ikeda strain is circulating. Homebred stock may also sicken because the Ikeda strain has been introduced to the property or an adjacent one with already infected stock. Although ticks can transmit infection, transmission can occur in their absence. In these situations, biting insects, such as March flies and possibly sucking lice, are implicated as vectors.

Recently, an unusual case was discovered in the Bega valley where seven of 46, 12 month old steers died from Theileriosis after becoming ill three weeks after introduction from the west. The owner reported that the steers were attacked by March flies after arriving. It is suspected that other stressors may have allowed infection to take such a toll on these steers. From February till end April this year there have been 7 diagnosed Theileria incidents in the

Bega valley.

In a recent DPI survey of 64 properties in NSW experiencing losses from Theileriosis, it was estimated that the mortality rate in affected mobs was 10%, and that it cost producers on average around \$20,000 each or \$78/per head. This is now a significant disease within NSW.

If you are planning to introduce stock, especially bulls, late pregnant heifers or cows from outside the area, you should consider prevention strategies. This might include ensuring that they are stressed no more than necessary, boosting their immune system by ensuring adequate parasite control, nutrition and trace element availability. Pour-on insecticides/repellents such as Coopers Easy-Dose®, Bombard® and Arrest Easy-Dose® are worth considering in 'at-risk' stock. There are currently no cost-effective treatment options available.

Contact your local office today or visit www.lhpa.org.au/districts/southeast