RIVERINA LOCAL LIVESTOCK UPDATE

February

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www.lls.nsw.gov.au/riverina

Case study: WATCH OUT FOR WEEDS

District Veterinarian Sophie Hemley

Sheep

CASE HISTORY

A producer grazing 600 head of newly introduced merino ewes on a cereal stubble paddock found seven head dead suddenly overnight. Upon further inspection six lethargic sheep were found standing under the trees and had obvious drooping ears and nasal discharge. The producer picked up two ewes that were also foaming at the mouth and died soon after. The ewes had been shorn and drenched in November and were in an average body condition score of three out of five. Supplementary feeding quality cereal hay.

CLINICAL FINDINGS

Ewe 1:

- Obviously lethargic with abnormal ear carriage (drooping ears)
- Marked jaundice (yellowing of the skin and whites of the eyes)
- Mild swelling of the muzzle and ears, with possible submandibular (jaw) swelling.
- Photosensitisation (scabbing) or the nose and associated weeping

Top left: Yellowing of the skin on the tail.
Top right: Photosensitisation on the muzzle
Bottom left: Yellowing of the eyes, drooping ears and hairy panic in the paddock.

DIAGNOSIS
Photosensitisation, likely secondary.

SO WHAT DOES THIS MEAN?
After diagnosing photosensitisation a paddock walk was completed to identify weed species that the ewes may have been eating. We identified hairy panic (*Panicum effusum*), caltrop (*Tribulus terrestris*) and heliotrope (*Heliotropium europaeum*).
Hairy panic and caltrop are known to contain toxins that cause liver damage and secondary photosensitisation. Essentially in secondary photosensitisation the chlorophyll in plants is metabolised in the animal to a light-sensitive compound which is normally excreted via the gastrointestinal tract, however when the liver is damaged this light-sensitive compound builds up in the bloodstream. If there are high enough quantities of the light-sensitive compound in the blood, non-haired areas (like the muzzle, face, breech etc) will develop burns when exposed to sunlight.
Heliotrope is known to cause liver damage and may also result in secondary photosensitisation.

WAS THERE ANYTHING WE COULD DO FOR THE EWES?
The most important thing to do when photosensitisation is first diagnosed is to quietly move livestock off the paddock causing the issue. It is ideal to move livestock into a shaded paddock or shed them to reduce their sunlight exposure. Providing cereal hay or lower quality pasture hay with no green colour is also helpful. Depending upon the severity and price of the livestock individual veterinary treatment (antibiotics, pain relief) may be recommended. Euthanasia may be suggested in some situations.

Prevention is the key! Identifying potentially toxic species in the paddock will allow you to watch how much livestock are eating and enables you to determine when to control the spread. After the recent rains and warm temperatures producers should keep an eye out particularly for caltrop.

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Case study: IS THAT SHEEP ITCHY?

District Veterinarian Katelyn Braine

Sheep

CASE HISTORY

A sheep producer noticed a mob of 850 head of ewes were continuously rubbing on fences. The producer had inspected the ewes for lice a few times over the last 2-3 months but he was unable to identify any lice. The producer treated the ewes with a mectin drench and no improvement was noted, so itch mite (Psorobia ovis) was ruled out. The producer called LLS to help determine why his sheep were itchy.

CLINICAL EXAMINATION

Three ewes with significant evidence of rubbing and wool pull were examined. Their wool was parted 5 times on each side of the body (10 partings total per sheep). Two to three lice were identified on the bodies of each of the ewes tipped. The lambs from this mob of ewes that were weaned two months prior were also examined. At least 20 weaner lambs were examined the same way as the ewes. No lice were identified on the lambs examined, but they had received a jetting treatment with a mectin at weaning.

DIAGNOSIS

Lice (Bovicola ovis)

SO WHAT DOES THIS MEAN?

The identification of lice can be difficult which can make the diagnosis hard in the initial stages of infestation. Factors which can affect the diagnosis of lice in sheep include:

- Time since infestation first occurred - it is difficult to detect any lice until at least two months after infestation is introduced to the flock. It generally takes three months for an infestation to become clinically obvious and cause fleece damage.
- Time after shearing - it is very difficult to detect light lice infestations on sheep with less than 2-3 months wool. In shorn sheep lice tend to concentrate in any longer wool left behind such as on the neck region or belly.
- Previous history of insecticide treatment - previous treatments may suppress the development of lice infestations on sheep until some months after treatment, even if treatment has failed. For example:
- Lousicides with rapid action: lice cannot be identified until at least three months post treatment.
- Lousicides taking 6-8 weeks to kill lice: lice cannot be identified until at least 5 months post treatment.
- Lousicides taking 10 weeks or longer to kill lice: lice cannot be identified until next shearing.
- Numbers of lice - lice in small numbers are extremely difficult to find on sheep. At least 400 to 500 lice per sheep must be present before they can be detected by routine inspection of unshorn sheep.

Also remember that adult lice are about 1.8mm long and about 0.6mm wide, so if you need glasses to read, you will need glasses and good lighting to see lice. As in this case, if one louse is found on one sheep in a mob, then the whole mob is considered to be lousy.

WHAT CAN WE DO TO TREAT LOUSY SHEEP?

The most effective treatments to eliminate lice from a flock are 'off shear' treatments (0-24 hrs after shearing) or 'short wool' treatments (1-42 days after shearing). Long wool treatments and treatments applied at other times will reduce the lice numbers but will not eliminate the infestation. If a long wool treatment is used, it is recommended that it is followed up with an off shears or short wool treatment to eradicate the infestation. It is also recommended that all mobs of sheep on your property should be treated at the same time. It only takes one sheep with lice to come in contact with another sheep for lice to spread throughout your flock, and as it takes months after the initial infestation before we can actually see lice, it can become a perpetual problem which you may never eradicate due to a continual source for spread.

There are numerous different lousicide products on the market with varying active ingredients, application methods, efficacies, with-holding periods, and pest resistance. Lice Boss is a website that contains specific information on lice infestations in sheep and can help you determine which product and application method is best suited to your property and management circumstances. See http://www.liceboss.com.au/sheep-goats/ for more information.

ARE THERE ANY BIOSECURITY MEASURES I CAN DO TO KEEP LICE OUT OF MY FLOCK?

Biosecurity practices which may help prevent lice from entering your flock include:

- Inspect introduced sheep for lice and treat or segregate as necessary.
- Maintain boundary fences to prevent strays from entering your property
- Inspect all stray sheep and return them to their original property with their owner's knowledge
- Plan treatment and lambing carefully as lambs can become infested from their mothers and can re-infest their mothers as the efficacy of the treatment declines.

For further information on lice in sheep head to Lice Boss (see link above) or the following DPI primefacts:
Sheep Lice: https://www.dpi.nsw.gov.au/animals-and-livestock/sheep/health/external-parasites/sheep-lice
Chemicals registered to treat lice and flystrike on sheep: https://www.dpi.nsw.gov.au/animals-and-livestock/sheep/health/external-parasites/chemicals-lice-flystrike

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TIPS FOR THE MONTH AHEAD

Summer rain and warm temperatures has meant that producers should be on the lookout for barber's pole worm (Haemonchus contortus) and other roundworms in their sheep. Sheep with a barber's pole worm burden will present as poor-doing, lethargic, anaemic, or dead. Sheep may or may not have a bottle jaw (swelling under the jaw). The best way to determine your flock's worm burden is to complete a WormTest. WormTests can be picked up from your Local Land Services offices. If you would like to discuss your WormTest plan or WormTest results you can ring your District Vet for local advice.

Follow us at **@locallivestockvets** on Instagram to see photos and videos direct from the paddock!

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