Animal Health Update

South East Local Land Services
December 2019

LOCAL DISEASE WATCH

Alex Stephens District Vet Yass

District Veterinarians have been part of the team responding to the **emergency bushfire situation** by providing assessment of stock and assisting in the evacuation centres. Please see the article below for more information on preparing your farm for a bush fire.

District Vets have been assisting individual producers and supporting the RSPCA to assess stock and give feeding recommendations. Feeding or destocking recommendations are given in cases where stock are assessed to be already in a poor body condition (less than fat score 1) and significantly at risk of further weight loss or running out of water.

Depleting water sources have been responsible for many of the RSPCA complaints, both in deaths of stock from water deprivation as well as stock getting stuck in mud around dams and creek lines. This is an important reminder in these tough times, especially for absentee stock owners, to **regularly check stock and stock water**.

Assisting the nationwide escalation of our efforts to **keep African Swine Fever out**, the whole Biosecurity team including the District Veterinarians, have been making contact with our pig owners and working with local councils to inspect all tips. This is being done to ensure that neither wild nor domestic pigs have access to prohibited pig feed. **Food waste containing meat** or other mammalian by-product **must not be fed to pigs** or ruminants, and it is illegal to do so in all Australian states and territories.

See here for more detail: Responsible disposal of food waste

Confinement feeding workshops held early this month were well attended, showing the importance that producers are putting on **maintenance of ground cover** as we head into a tough summer. Although there is an initial set up cost, confinement feeding areas are a good investment for this dry period and for periods of need in the future. There are significant animal health recommendations and guidelines for sheep in feedlot situations.

The most important of these are to pay attention to:

- **Stocking density**: stock require at least 5 square meters per sheep or stress will decrease performance.
- Water quality: extremely important with regular checking and cleaning of troughs.
- **Roughage:** 10% roughage is recommended in a confinement situation.
- **Mineral balance:** when feeding grain you need to supplement with 0.5% salt and 1% calcium as a percentage of the total grain ration. 0.5% magnesium can also help with stress and performance.
- Vitamin A injection: every 3 months for sheep not on green feed.
- **Vaccinations:** an enterotoxaemia 5 in 1 booster is recommended every 3 months. Those with pregnant sheep in confinement situations may also want to consider Campyvax.
- Beware acidosis: ensure animals are well adjusted to the grain diet by slow introduction before



- being placed in a confinement situation and remember to shandy any changes in pellet batches or grains.
- **Environmental stimulation:** stock have been shown to do better when they have logs or tyres to 'play' on.
- Pull poor performers: how well you do on average with all your stock depends on how well
 you look after the tail end. Some animals are unsuited to a confinement feeding situation and
 will do better back in the paddock or in a separate enclosure with like sized animals.

Stockplan workshops. Significant destocking is advisable in prolonged dry conditions but you may be wondering how it will affect your bottom line. In response the LLS agriculture team have been running workshops to help producers workshop different destocking or feeding through options. Contact your nearest LLS Agriculture Advisor for more information.

Early weaning of calves. One thing we learnt from last year is that early weaning of calves worked well if done right. It is more efficient to feed a dry cow and a calf separately for growth than to feed cows to produce milk for calves. Once calves have reached 90 kgs and 90 days old they have enough rumen development to be successfully weaned. However unless you have green feed for them to go onto they will need to be supplementary fed a high protein feed with roughage available.

See here for more information: Weaning beef calves - NSW Department of Primary Industries

It has the added effect of boosting cattle joining percentages, and minimising cow weight loss. Cattle can then be sold earlier to reduce cattle numbers or fed for weight maintenance or slow weight loss utilising fat on the back.

Feed testing: Ensure purchased feed comes with a feed test, and if it doesn't get feed tested for energy and protein in order to accurately calculate rations and estimate nitrate risks. Test kits are available from the LLS offices and there is also DPI funding available for testing feed.

Use the DPI drought hub and the drought and supplementary feeding app to correctly estimate feed quantities and costs involved for weight gain goals. Download the free app or follow the link <u>Drought</u> and <u>Supplementary Feed Calculator</u>

For more information on how to manage animals during a drought, including feeding requirements, download the NSW Managing Drought Guide.

Manage your parasites- use faecal egg count worm test kits to assess your need for drenching, over drenching in dry times will lead to resistance problems but under drenching is also a risk in nutritionally stressed animals.

Water testing: water testing kits are available in LLS offices to assess stock water. Bore water can be assessed for mineral content and drinkability and dam water for algal bloom. It is important that you also assess your water levels and quality and work out your back up plan.

Manage your sheep weaners well to maximise survival. Keep the flies out, monitor for parasites and keep them on a ration that allows them to gain weight. Weight loss in growing animals leads to stress on the immune system and disease.

NO FLY ZONE

Lou Baskind - District Vet Braidwood

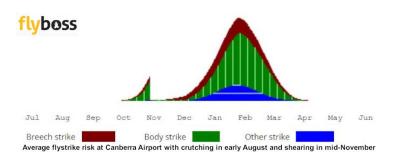
As it warms up flies are emerging, having overwintered in the soil. *Lucilia cuprina*, the sheep blowfly, is on the lookout for susceptible sheep to strike. *Lucilia* is attracted to the smells of rotting and decay on live sheep. These smells are released from areas of wool that have become moist and begun to fester

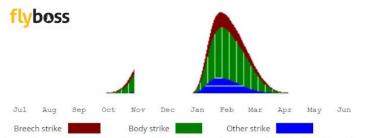
with bacteria. It's not just rain that can moisten wool. Diarrhea (scouring), urine soaking or blood from wounds can do it too. *Lucilia* will lay hundreds of eggs, and send signals to other female *Lucilia* flies to lay in the same spot. Within about 36 hours, the eggs will have hatched, the larvae moulted and the maggots will be feeding ravenously on the living flesh of the sheep.

This is what is known as "fly strike" and the damage causes pain, distress and even death. Once fully fed after 3 - 4 days, the maggots drop off and burrow underground to complete their lifecycle, with flies emerging from the soil again as another fly wave. This whole cycle can be as fast as 12 days in the right conditions. The lifecycle relies on the flies being near sheep and near water, and they generally don't travel far, meaning most farms are essentially breeding their own flies. The more you can catch and control strike at the early stages in your own flock, the less strike flies you have around.

For sheep, there are great online tools at www.flyboss.org.au to help you find ways to break the lifecycle of Lucilia. The University of New England manages the Flyboss website where you can look at different strategies, and their timings, specific to your geographic location.

Here is an example: The graphs show average flystrike risk for different times of the year. The height of the graph indicates the average flystrike risk relative to the highest risk period. The first graph shows a mob of sheep at Canberra Airport, that are usually crutched in the first week of August and shorn in Mid-November. The second graph adds a chemical treatment, low dose dicyclanil, at the time of shearing. The third graph does not treat with a chemical at shearing, but instead applies the low dose dicyclanil in mid-January.





Average flystrike risk at Canberra Airport with crutching in early August and shearing in mid-November and low dose dicyclanil at time of shearing in mid-November





Average flystrike risk at Canberra Airport with crutching in early August and shearing in mid-November and low dose dicyclanil in mid-January Application and timing of interventions such as crutching, shearing and chemical treatments can significantly change the risk of your sheep being struck. The Flyboss website also gives information on breeding and selection for sheep less likely to be struck, proper use of chemicals to reduce and slow chemical resistance, and correct treatment of sheep that do get struck.

Meanwhile other flies, like the bush-fly, are also building up numbers in the warmer weather. Bush flies lay their eggs in dung pats of animals. The eggs develop into adults that feed on eye and nose discharge, looking for liquid and protein. In "ideal" conditions bush flies can go from egg to adult in just over a week, and a single female fly, in theory, could produce millions of offspring. Not only are these flies a nuisance to us and to animals, their movement from one animal to another, searching for eye and nose fluid, has the potential to transmit disease.

In cattle, flies significantly contribute to the development of **pinkeye**. They do this by transmitting the bacteria *moraxella bovis*. Pinkeye in cattle is a highly contagious and painful infection of the eye which can leave one or both eyes blind. Dusty conditions and bright sunlight are predisposing factors. This means outbreaks of pinkeye are most common at times when dust, bright sunlight and flies are most prevalent, i.e. summer.

While dust and sunlight are often out of our control, fly numbers are less so. The following can all provide assistance in fly control:

Insecticides: the pour-on synthetic pyrethroid insecticide, deltamethrin can give fly protection for up to 3 weeks and greatly assists in reducing pink eye transmission. Observe any applicable WHP & ESI.

Bait stations: All blowfly traps rely on flies flying up odour trails to locate the source of the smell, entering the trap and being unable to escape the trap. These do need to be maintained to be effective but can catch a large volume of flies and make a difference to an area around the bait station.

Biological control: There are many beneficial insects and mites that assist in fly control. The control provided by these is called natural, or biological control. Good farm management will preserve these beneficial predators and parasites.

Good management: includes general farm hygiene, maintaining healthy animals, trimming grass around sheds, cleaning up spilt feed around storage areas and animal sheds, reducing moisture in and around buildings by controlling water run-off, guttering, drains and maintaining leakfree stock watering systems.

BUSHFIRE PREPARATION FOR LIVESTOCK OWNERS

Alex Stephens District Veterinarian Yass

The following list provides some of the **actions** you can take to maximize your ability to respond to an emergency and minimise the damage to your farm and livestock.

Preparation:

- **Prepare adequate low risk areas** where stock can access water but the potential bushfire fuel is minimal. These paddocks should be large enough to allow stock to move away from the fire and ideally be protected by a road or a 3-6 m ploughed fire break. Low risk areas include: chewed out paddocks, ploughed paddocks, irrigated paddocks, or green summer crops.
- Consider **adequate current insurance** for the value of your stock and infrastructure (fences, fodder and sheds and yards).
- **Take an inventory** and photographs of all your stock, fodder, farm sheds and machinery, building interiors and exteriors in case of a claim.

- Ensure all your animals are identified ideally with NLIS ear tags and that all horses, cats and dogs are microchipped.
- Consider **keeping hay stored at multiple locations** to minimise risk of loss. Ensure sheds are protected with a fire break or that fuel levels around them are minimised.
- Have back ups of **important farm documents** and records or be able to grab them if you need to evacuate.
- Install the Fires near me NSW app on your phone and listen to your local ABC radio for updates on fire situations.
- Know the phone number of your **local RFS branch captain** and get involved with your local branch. In a bush fire situation there is an important job for everybody.
- Have an evacuation plan for your pets, horses and chickens. Do you have cages or floats on hand. In the case of a bushfire, safe local evacuation centers are set up for you to evacuate your stock to. Ring your Local Land Services for details.
- **Equip all your farm vehicles**, tractors and bikes with fire extinguishers and a shovel. Also consider equipping your vehicles with fence cutters, water, phone chargers, woolen blankets, and appropriate clothing and footwear.
- Remind all your staff that welding, harvesting grinding or slashing is not permitted on high fire risk days.

Please see the following link for comprehensive preparation information

Before an emergency - NSW Department of Primary Industries

If you have been affected by fire:

Please call Local Land Services as we work in a team with other emergency agencies to assist you. You may then be redirected to a 1800 hotline number to centralise all calls for assistance. The District Vet and biosecurity team can assist with the assessment of your livestock and the emergency response may also assist with the provision of hay and or water to burnt out properties.

Should you be in a position where you need to assess your own burnt stock for requirement for euthanasia and a veterinarian is unavailable see here for appropriate guidance.

TRANSPORT RECOMMENDATIONS FOR DROUGHT AFFECTED LIVESTOCK

Chelsi Keubler, Sydney Uni Final year DVM

With climate conditions in their current state, it's understandable that sometimes the best option (though not necessarily the easiest) is to cull or sell your stock. However, animals that are too skinny or unwell from lack of available feed may not be fit for travel.

Animals in light condition have very minimal energy reserves and the preparation and assessment of livestock before transport must be **adequate for the intended journey.** Animals in condition score 1 (fat score 0) and below are in too poor a condition to be suitable for sale through the saleyards due to the time off feed involved. These animals are either best consigned straight to an abattoir or fed up to improve their condition on farm or destroyed.

There are Australian animal welfare standards and guidelines for the land transport of livestock which provide guidance for all people responsible for the care of livestock around transportation. Failure to meet these standards may see the person responsible charged with an offence enforceable by the

Prevention of Cruelty to Animals Act 1979 (POCTA Act). See here for details: <u>land transport of livestock</u> - Animal Welfare Standards

There are 3 main stages of transport at which a person or party is held responsible for the well-being of the animals involved. They are:

Stages of transport	The people responsible
1. Prior to loading	The producer/consignor/agent
2. Loading, during the journey, and unloading	The transporter/driver
3. After unloading	The receiver (the processor, agent, saleyard manager/superintendent, etc)

Providing proper husbandry to meet the animal's basic needs is the best first approach to ensuring adequate animal welfare prior to transport. This involves good nutrition and access to water, early socialisation, ensuring the animal is free to exhibit normal behaviours, and minimising stress, pain, injury, and/or disease. Other practices to consider include ensuring mustered animals have had sufficient time to rest before being transported.

Before loading your livestock, abide by the following 'is it fit to load' checklist:

- the animal can walk on its own and bear weight on all 4 limbs
- the animal is free from visible signs of injury/distress or conditions that can compromise its welfare during transport
- the animal is strong enough to make the journey (ie. not dehydrated or emaciated)
- the animal can see well enough to walk, load, and travel without impairment/distress (ie. not blind in both eyes)
- the animal is not in late pregnancy or too young to travel
- the animal has had adequate access to water prior to loading to meet the maximum time off water standards.

If one or more of the above standards is not met, the animal is not fit to load.

New 'fit to load' guide released | Meat & Livestock - MLA

For more guidelines on how to assess and prepare livestock in low body condition for travel please see the MLA guideline.

Please also see the guidelines and recommendations put together by the NSW DPI, a summary of which is found below.

Welfare scoring nutritionally deprived beef cattle, dairy cattle

Any animal below a Fat Score of 1 (condition score 0) is not suitable to be sold at the saleyards and must be assessed prior to any transport.

BEEF CATTLE

Fat Score 1 (At Risk) – Transport recommendation: able to be transported to abattoir, saleyard, or agistment with minimum time off feed



- backbone can be seen but individual spines are difficult to make out
- short ribs are fairly sharp to the touch
- tailhead, hip bones, and long ribs are easily seen
- the area between the tail and pin bones is sunken
- rump muscle is slightly concave (like a shallow bowl), and hindlimb muscles are thinning
- tail bones are not identifiable
- animals are bright in appearance, alert, and highly mobile.

High Risk 1/Fat score 0 – Transport recommendation: transport to abattoir and agistment only; unsuitable for sale through saleyards or long-distance transport



- · significant muscle loss of loin and hindlimbs, udder is shrinking
- · rump muscle is concave (like a bowl)
- backbone, long ribs, pin bones, and tailhead are easily seen
- short ribs are all easy to see and sharp to the touch

- dull, no longer grooming/licking itself
- can still lie down/rise with ease, still mobile but not as energetic
- dung pats are normal and animal is still chewing cud.

High Risk 2 - Transport recommendation: not fit to travel; do not transport



- · very thin the backbone, hips, pins, tailhead, long ribs, and short ribs are all easily seen
- · hindleg muscles are so depleted that the stifle joint can be made out
- · rump muscle is deeply concave
- skin is tight and udder is shrunken and tucked up to the body
- dewlap is a skinfold and the bones of the chest can be seen
- · dung pats are abnormal contain undigested feed, mucous membrane, dirt, or excess water
- dull in appearance and is no longer grooming itself, cud chewing is infrequent
- slow to walk, drags its feet, and shows difficulty lying down/standing up.

Downer -seek veterinary advice immediately for euthanasia decision



- meets all of the descriptions as stated above for 'High Risk 2'
- · immobile and no response to external stimuli (doesn't care if people/other animals walk near it)
- · if able to walk, difficult to maintain balance
- · if lying down, the animal won't stand without assistance

- 'paddle' marks around the animal lying down from where it has tried to move its legs to rise and was unable to
- · eyes are tearing, sunken, and glazed
- · no/limited rumen function brown liquid faeces.

SHEEP

Fat Score 1 (At Risk) – Transport recommendation: able to be transported to abattoir, saleyard, or agistment only with minimum time off feed



- · individual ribs and spines of backbone can be felt
- · depressions between ribs are obvious and easily seen in animals with short wool
- pin bones are easily seen and the loin muscle feels concave
- · individual tail bones can't be seen
- animal looks slim when viewed from behind
- animal is alert and easily mobile; gait is normal
- · can still lie down/rise with ease
- healthy appetite; still eating grass with head to ground
- high lamb mortality if lambing or in early lactation.

High Risk – **Transport recommendation:** transport to abattoir and agistment only; unsuitable for sale through saleyards or long-distance transport



- very thin pins are sunken, rump muscle is concave, animal is 'tent-shaped' when viewed from behind, skin is loose
- · wool is dull and rough
- the backbone, hips, pins, tailhead, point-of-shoulder, short ribs, and long ribs are all easily seen; short ribs are pointed to the touch
- · significant muscle loss of loin and hindlimbs
- · back is sunken or humped, head is kept lowered
- dung pats are abnormal and are evidence of poor rumen function decreased rumenal contractions
- slow and unsteady gait, animal drags its feet
- · difficulty lying down/standing up.

Downer – seek veterinary advice immediately for euthanasia decision



- severe muscle wasting and very little to no fat cover, eyes are sunken/glazed
- · immobile/cannot walk, lying down and unable to stand
- shows very little response to external stimuli
- · 'paddle' marks around the animal lying down from where it has tried to move its legs to rise and was unable to
- abnormal faeces show no/poor rumen function; may have very little moisture content due to dehydration.

Contact Us

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