Animal Health Update

South East Local Land Services

September 2021

SOUTH EAST MONTHLY DISEASE SURVEILLANCE RESULTS
South East District Veterinarians

African Swine Fever (ASF) a notifiable emergency animal disease was excluded as a cause of death in 2 feral pigs found in the Upper Lachlan Shire. ASF is still exotic to Australia and could cost the agricultural industry hundreds of millions of dollars if an incursion occurred. Pigs suffering from the disease usually display 'blotching' of the skin, incoordination, diarrhoea, vomiting and pneumonia. Anyone suspecting ASF in a pig, or any other notifiable disease, should call their local District Veterinarian or the **Emergency Animal Disease hotline 1800 675 888**.

Hendra virus was excluded in a horse that died after having been seen by a vet for a high fever. Hendra virus is transported by bats and can be infectious to horses when they camp under trees where bats carrying the disease roost. It can also be transmissible and fatal to humans. Even though the main bats implicated in its spread have not yet migrated this far south, the disease itself is moving south, so it was important to exclude in an unvaccinated horse.

Other horses with fever symptoms over this last month were found to have been recently infected with **Ross River Fever virus**. Large naïve Kangaroo populations that grow in wet seasons following droughts are a large reservoir of this virus, spread by mosquitos. Take care to protect yourself from mosquito bites as much as possible this season. As always, if you can vaccinate your animals against an infectious disease that may affect you, we highly recommend that you do.

Grass tetany (Hypomagnesaemia) has claimed a record number of cows with calves at foot this winter. What made this so much more frustrating was that in most cases there was magnesium on offer in the form of lick blocks or loose licks. The cause was the extremely low availability of magnesium in the grass dominated pastures. This was a result of soil and plant micronutrient dynamics, cold soil, many overcast days with occasional sunny days, reduced grazing time in bad weather, minimal clover and roughage in pasture compositions and difficulty in getting hay to cattle with pastures so wet. Refer to our piece in the May Animal Health Update for more information.

Hypocalcaemia has been diagnosed in cattle on the point of calving. Sometimes referred to as **milk fever,** low blood calcium is most likely to occur just before calving, when calcium is used to create the foetal skeleton, or just after calving, when large volumes are deposited into the milk. Older fatter animals are more at risk of hypocalcaemia and special care should be taken when dealing with this class.

An effective treatment is putting out loose licks of coarse salt and limestone. These can be started at a 2:1 salt to limestone ratio before being reduced to 1.5:1 and then 1:1. This lick combination work very well as it is cheap and easily put together.

Another benefit of this loose lick is that a magnesium supplement in the form of CausMag (MgO) or magnesium sulphate can easily be added if required (1:1:1). If stock are reluctant to eat the lick placing a layer of salt on top and increasing the salt ratio are both effective strategies.

Refer to our piece in the June Animal Health Update for more information.

Pregnancy toxaemia, otherwise known as **twin lambing sickness** or **ketosis** has mostly been seen in sheep carrying multiple foetuses but has also been seen this month in late pregnant cattle in fat condition. When the energy demands of multiple foetuses and the energy demands of staying warm combine with reduced rumen space and limitations on feed quality and quantity the balance can tip to insufficient energy intake.

Nutritional stress has contributed to disease outbreaks of worms, scours and pregnancy toxaemia. The cold wet weather and overcast days resulted in the failure of some crops, reduced pasture growth rates and higher utilisation of fat and body reserves to stay warm. Stock in many cases lost more weight than was expected. Animals that are losing weight and eating close to the ground are more susceptible to picking up higher intestinal worm numbers and breaking down with a bacterial scour. The difficulty of super saturated pastures also made it near impossible to get the supplementary feed to sheep or cattle at the levels required. Although we were not in a drought, higher stocking rates going through the winter and low pasture growth rates created the same effect, the drought feeding guide, available on the NSW DPI Drought Hub, is a very handy resource. Just like in the drought, grain must be introduced slowly, and the rate gradually increased and fed regularly at the start. Intermittent feeding due to weather and reliance on lick feeders also saw the development of cases of subacute ruminal acidosis (or **grain poisoning**)

Black scour worm- (Trichostrongylus spp) have been found to be the cause of scours and weight loss in sheep and goats this wet winter. Affected sheep looked terrible, tucked up and scouring but turned around quickly after drenching with an effective drench. In some cases, the worms, weather and nutritional stress contributed to the development of bacterial scours, with **Yersiniosis** being cultured from the intestines of affected mobs. Drenching and decreasing the stress on the stock resulted in a resolution of the problems.

Barber's pole worm (Haemonchus spp) has continued to cause anaemia and deaths on the coast on multiple holdings and the whole South East region will be on high alert for the rapid development of barber's pole worm problems as the weather warms this spring.

Listeriosis has caused multiple cases of abortions and premature births, causing between 2 and 20% losses of lambs in the affected mobs. ***Listeria ivanovii*** was cultured from the stomachs and livers of the aborted foetuses. This disease is rarely seen in pasture fed animals outside of Victoria. This outbreak has been associated with grazing very wet or flooded improved pastures with the bacteria multiplying in rotting vegetation.

Yersinia has been diagnosed as the cause of abortion in one sheep flock and scours in a separate flock. ***Yersinia pseudotuberculosis*** was diagnosed as the causative in both cases. Increased rainfall this year has been the primary risk factor. Stock on wetter pastures will carry an increased risk of infection. Any scours that are not related to high faecal egg counts should be investigated to prevent production losses and deaths occurring.

Iodine deficiency has resulted in the birth of some weaker lambs with increased susceptibility to cold stress. Affected lambs had a **goitre** which is an enlarged thyroid gland palpable on the underside of the neck below the jaw. Reduced iodine intake from pastures is a result of the wet year with good pasture growth. It can be prevented, where a deficiency occurs, by using a pre lambing iodine drench or lick

blocks containing iodine. If you are experiencing a higher rate of still born lambs, collect lambs and talk to your vet about a post-mortem.

PEM (Polioencephalomalacia) caused by a sudden deficiency of thiamine (B1) resulted in death and brain damage in multiple sheep flocks.

It occurred where younger hungry sheep were placed on higher quality green feed. Some sheep were found dead, but others were seen standing separate from the mob with the head down, others were **star gazing,** blind, eyes flicking with nystagmus and teeth grinding. Prompt diagnosis and treatment with vitamin B1 from the veterinarian saved affected sheep. This disease can also occur in cattle and goats.

Sheep lice have been investigated in sheep flocks including in two cases of Dorper only flocks. Signs reported and observed in these cases ranged from increased rubbing and biting, unusual hair loss of the neck and flank, inconsistent shedding of fleece, and presence of wool tags. Ewes with outward signs of lice as well as asymptomatic ewes all demonstrated lice on multiple fleece partings demonstrating that fleece shedding sheep can contribute to the spreading of lice. Lice pose a major and expensive biosecurity risk for your neighbours and a welfare issue for the affected sheep.

Cattle lice numbers do build during winter, and we commonly get asked about them at this time of year. Lice numbers tend to be associated with reduced nutritional plane or stress, with stock on poorer feeds suffering heavier infestations. Smaller lice burdens will usually resolve with the spring. If your stock are suffering with a heavy lice burden double check that they are on a sufficient plane of nutrition and consider treatment. Commercial products for lice are readily available and effective and some drenches will also treat lice. It is essential to carefully read the label to ensure proper dosing volume and intervals.

Pig lice were seen in the Shoalhaven area. Signs reported were itchiness and presence of external parasites in the ear. On microscopic examination, the presence of multi-stage lice and their eggs could be seen on the hair shafts. Lice in general is contagious and species specific. For example, lice in pigs (*Haematopinus suis*) will not survive off a sheep, human or other stock animal. Pig lice may also be seen hiding in the folds of skin in head and neck areas and the internal surfaces of the legs and flanks. Other symptoms of lice in pigs may include anaemia (red blood cell loss) especially in piglets, and signs of self-trauma (e.g. hair loss, redness, scratches, scabs and crusts) in all ages due to intense irritation. Currently registered products for pig lice are macrocyclic lactone (ivermectin and doramectin) based injections. For more information on pig lice and other external parasites: External parasites of pigs (nsw.gov.au)

LANDHOLDER RESPONSIBILITIES DURING THE COVID-19 PANDEMIC

Henry Clutterbuck (Goulburn) LLS District Veterinarian

The COVID-19 pandemic has been an ever-evolving beast and we thank landholders for their ongoing understanding and support. With that said it is important to clarify landholder responsibilities regarding the care and management of their stock. This is particularly important for landholders whose primary residence is in Greater Sydney.

Animal owners have a legal responsibility under the *Prevention of Cruelty to Animals Act 1979* to ensure the welfare of their livestock and companion animals. These responsibilities allow you to travel to attend to the welfare of your animals, provided you follow strict hygiene and social distancing requirements.

Movement of owners and their animals to a veterinarian or a veterinarian attending a property are, at the time of writing, permitted activities under the Health Orders and should not be put off.

The Outdoor activities and animal welfare webpage is constantly updated with information on animal welfare responsibilities and movement restrictions. Landholders are advised to also visit the NSW Government's COVID-19 webpage for the latest health advice. COVID-19 related questions can be emailed directly to the NSW DPI Liaison Team at covidinfo@dpi.nsw.gov.au.

As always Local Land Services District Vets are available to discuss animal health issues with landholders and help where possible.

HUMAN HEALTH RISKS ASSOCIATED WITH ASSISTED BIRTH OF LIVESTOCK

Lou Baskind Braidwood (Palerang) LLS District Veterinarian

Spring is a beautiful and busy time of year on the farm, and on many properties it's the time that lambs, kids and calves are being born. During this highlight on the farming calendar, close contact between many people in the family and birthing or newborn animals is common practice.

Unfortunately, this close proximity to animal tissues and fluids can expose people to several concerning zoonotic diseases – diseases that animals can transmit to people.

Key points:

- there are several diseases carried by animals that can infect and cause illness in people
- assisting birth and caring for newborns is an exposure risk due to contact with reproductive tissues and fluids
- young children, the elderly, pregnant women and people with weakened immune systems are more vulnerable
- simple measures such as hand washing and wearing protective clothing can greatly reduce the risk of contracting these diseases.

Several diseases can be spread between animals and people during contact with reproductive tissues and fluids, urine, or the environment and objects which these tissues and fluids have touched. Some of these zoonotic diseases include:

- **Q fever**: a bacterial disease that can cause a severe flu-like illness in people which can progress to pneumonia or inflammation of the liver or the heart. In some cases, it can cause lifelong chronic disease. The bacteria contaminate the environment and can be spread in dust and by wind. Affected animals may have abortions, stillbirths, and the birth of small or weak offspring, but in many cases infected animals show no signs of disease.
- **Leptospirosis**: a bacterial disease that starts as an acute flu-like illness in people and can progress to severe disease of the liver, kidneys and nervous system. It may lead to hospitalisation and in some cases can be fatal. Affected animals may have abortions, stillbirths, and the birth of small or weak offspring, but in many cases infected animals show no signs of disease.
- **Listeriosis**: A rare but potentially fatal bacterial disease in people that can cause blood poisoning and meningitis. If pregnant women are infected during pregnancy it can lead to miscarriage, stillbirth or infection of the newborn. Affected animals may have abortions, stillbirths, and the birth of small or weak offspring, but in many cases infected animals show no signs of disease.
- **Campylobacter, salmonella, e. coli and yersinia**: bacterial diseases that can cause "gastro" in people and animals - diarrhoea, cramping, abdominal pain, and fever – and in severe cases more serious disease. These bacteria are often carried asymptomatically in

animals, meaning they show no signs of disease. In some cases, they may be associated with abortions in animals.

Some people are more vulnerable to zoonotic diseases due to having an undeveloped or weakened immune system due to age, pregnancy status, disease or medication. Those that should take extra care, or be prevented from exposure completely if possible, include pregnant women (and their unborn foetus), newborn babies, children especially those under five years old, the elderly, people on cancer treatment or steroids, people with diabetes, kidney disease, liver disease or HIV infection. These groups are not only more susceptible to infection with zoonotic diseases, they are also more likely to develop the more serious forms or complications of these diseases. Speak to your GP about your personal level of vulnerability.

Most of these diseases spread by direct contact, either getting in through cuts, abrasions or chaps in your skin or by you ingesting them. Often ingestion is inadvertent - it is on your hands and then you unconsciously touch your hand to your face and mouth. These hand to mouth actions are especially hard to prevent in children. Sometimes the disease agent might be inhaled, such as in the case of Q fever if the organism is aerosolised in dust.

There are some simple steps you can take to protect yourself and others who are involved in assisted birthing and caring for newborn animals:

- **Wash your hands often:** Use soap and lather for at least 20 seconds before rinsing
- **Wear protective clothing and equipment:** Use arm length disposable gloves, wear coveralls that you remove after contact with animal fluids, wear eye protection to protect from splashes, wear a mask to protect from aerosols (a well-fitted P2 mask is recommended)
- **Avoid exposure:** if possible, especially for vulnerable people
- **Report and investigate:** if there is an outbreak of abortions, stillbirths, or the birth of small or weak offspring in your animals speak to your veterinarian or local District Veterinarian and invest in diagnostic testing to determine the cause
- **Vaccination:** Speak to your GP and your District Veterinarian about other measures you can take to protect yourself and your family. For example, cattle producers can vaccinate their cattle against Leptospirosis to ensure the safety of those handling stock and a GP can advise and ensure that all eligible people are vaccinated against Q fever.

NSW Health Q Fever fact sheet:
https://www.health.nsw.gov.au/Infectious/factsheets/Pages/q-fever-farms.aspx
NSW Health Leptospirosis fact
sheet: https://www.health.nsw.gov.au/Infectious/factsheets/Pages/leptospirosis.aspx
NSW Health Listeriosis fact
sheet: https://www.health.nsw.gov.au/Infectious/factsheets/Pages/listeriosis.aspx

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