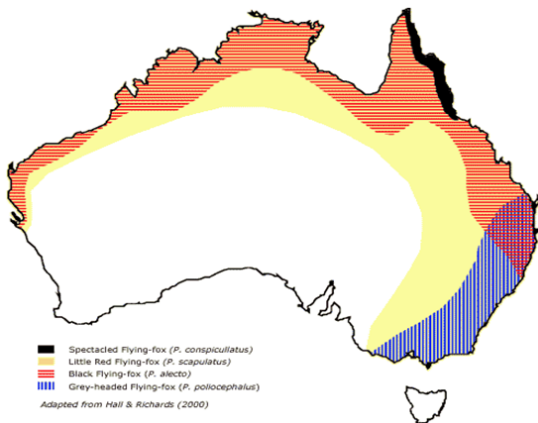


LIVESTOCK HEALTH AND PEST ANIMAL MATTERS

Hendra Virus!

The recent cases of Hendra Virus on the north coast of NSW and in Qld have highlighted the need for horse owners to know when to suspect Hendra and how to reduce the likelihood of their horses contracting the disease.

The natural hosts of Hendra Virus are fruit bats (flying-foxes). The virus transmits from bats to horses via body fluids from bats roosting or feeding overhead. It can then transmit from horses to humans via body fluids, especially respiratory secretions (sneezing, coughing). The disease is usually fatal in horses. While very few humans have contracted the disease from horses, the consequences are severe and can include death. The virus is not known to transmit directly from flying-foxes to humans. Horse to horse spread can occur if they are in close contact.



Flying-foxes are relatively common in the North West LHPA, with the Little Red Flying-Fox and the Grey-headed Flying-Fox being found in our region. As such, we need to be aware that Hendra Virus could occur. The peak risk time is between June and October each year. While at first it might seem like a sensible option, disturbing flying-foxes in order to move them away from horses may be counterproductive, as stressing the bats is thought to result in them being more likely to shed the virus.

The early signs of Hendra can easily be mistaken for colic. Signs that should raise concerns in "colic" cases include a high fever (over 40°C), breathing difficulty, a foamy discharge from the mouth or nose, staggers or a head tilt. If you have a sick horse showing any of these signs, seek veterinary advice immediately, reduce your contact with the horse (especially around its head) and ensure that you thoroughly wash your hands etc after handling the horse.

If you are in an area where flying-foxes occur, there are some basic steps to take to minimise the chance of contact between the bats and your horses.

1. Do not place feed and water containers under trees, particularly if flying-foxes are attracted to those trees.
2. If possible, remove horses from paddocks where flowering trees (eg cadaghi's) have resulted in a temporary surge in flying-fox numbers. Return the horses after the trees have stopped flowering.

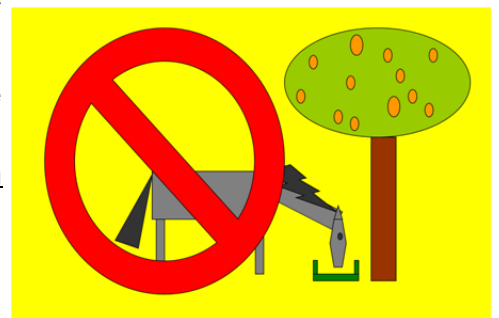
The Queensland DPI has considerable information on the disease www.dpi.qld.gov.au (follow the links through Animals and then Horses).

Any suspect Hendra Virus cases should be reported to your District Veterinarian as it is a notifiable disease in NSW. You can also call the Emergency Animal Diseases Hotline on 1800 675 888 (a good number to store in the mobile).

Generally Hendra Virus should be considered a possibility in horses with:

- ⇒ Respiratory and/or nervous signs
- ⇒ Acute onset of disease
- ⇒ Fever
- ⇒ Rapid deterioration to a very sick state or death (within 48 hours)

Don't forget that it might look like colic in the early stages!



Offices: 101 Barwan Street, PO Box 18 Narrabri NSW 2390 T (02) 6792 2533 F (02) 6792 1738
 203 Balo Street, PO Box 253 Moree NSW 2400 T (02) 6752 8012 F (02) 6752 4368
 75 Fox Street, PO Box 32 Walgett NSW 2832 T (02) 6828 1047 F (02) 6828 1507
 19 Stephen Street, PO Box 13 Wyallda NSW 2402 T (02) 6729 1528 F (02) 6729 1716
 8 Evans Street, PO Box 44 Inverell NSW 2360 T (02) 6722 3091 F (02) 6721 0517

www.lhpa.org.au

Land & Stock Returns - vital in responding to emergency diseases

In recent weeks ratepayers would have received their Land and Stock (L&S) return for livestock on their holding as at 30 June. Most would complete this thinking it is yet another useless government form that has to be returned by the 31 August.

However the main purpose of the L&S return is to assist livestock disease control, especially in responding to exotic and other emergency diseases.

For example, during the Equine Influenza response, L&S returns were used to map horses in districts requiring vaccination.

When Swine Influenza was detected at a Dubbo piggery in 2009, there was an urgent need to identify all pigs with a few kilometres for disease surveillance. Again, L&S return data was used.

L&S return data is also used for planning of local disease control programs. Currently the North West LHPA has two active surveillance programs (buffalo fly and the Northern Slopes pestivirus project) that rely on L&S return information.

Unfortunately, many landholders either do not lodge a return, return it late (after August 31), or inaccurately complete the L&S returns. Inaccurate L&S returns were a constant problem during the Equine Influenza vaccination program, and are a continuing barrier to future successful emergency disease responses. Similarly, inaccurate L&S data continues to make work on regional programs such as Buffalo Fly and Ovine Brucellosis more difficult than otherwise.

Feral pigs thrive after ideal summer conditions

North West LHPA landholders are currently experiencing a dramatic increase in feral pig numbers. This increase stems from optimal breeding conditions following the exceptionally wet summer and abundant feed growth.

While absolute figures are not obtainable, the size of the increase can be assessed by the rise in the number of pigs killed during LHPA helicopter shoots. In 2010, a total of 6,403 feral pigs were destroyed from the air. To July in 2011, the North West LHPA has destroyed 10,211 - **an adjusted increase of over 300%**!

Feral pigs have a large reproductive capacity if feed conditions permit. On average, a mature female feral pig can wean two litters of seven piglets in 12 months. Not all of these 14 weaners will survive, but survival is greatest when feed conditions are good. This high reproductive potential explains why pig numbers rebound quickly after droughts and control programs.

Feral pigs are well known for their damage to crops, but an often overlooked loss is predation on lambs. On one property within the Authority there was a 50% reduction in lamb marking percentage this year, with feral pig predation being the most likely cause.

So what can landholders do to stem the tide? The winter months are ideal for 1080 poisoning programs, and landholders are confirming good baiting results at the present time. The process begins with free feeding of grain in areas where pig activity is evident. The longer free feeding takes place, the more effective the program will be (minimum of 3 free feeds). This enables the appetite of the mob to be assessed so that the correct amount of poisoned grain can be applied. It also allows shy pigs in the mob to become accustomed to feeding. A recent innovation within the North West LHPA is the use of motion sensor cameras to gain greater accuracy in assessing requirements during this critical stage.



Winter is also when trapping is most likely to be effective. The North West LHPA has traps available for loan to ratepayers at all office locations. Rangers can advise on trap design, construction, placement and trapping methods.

Aerial control is another option. However at a cost of approximately \$1,000/hour it is not always the best initial strategy. It is most often deployed when poisoning and trapping are less effective due to the abundance of alternate feed sources. The North West LHPA provides subsidies in relation to ferry costs provided seven hours of control are carried out. Ammunition and a trained aerial shooter are also supplied to landholders at no cost.

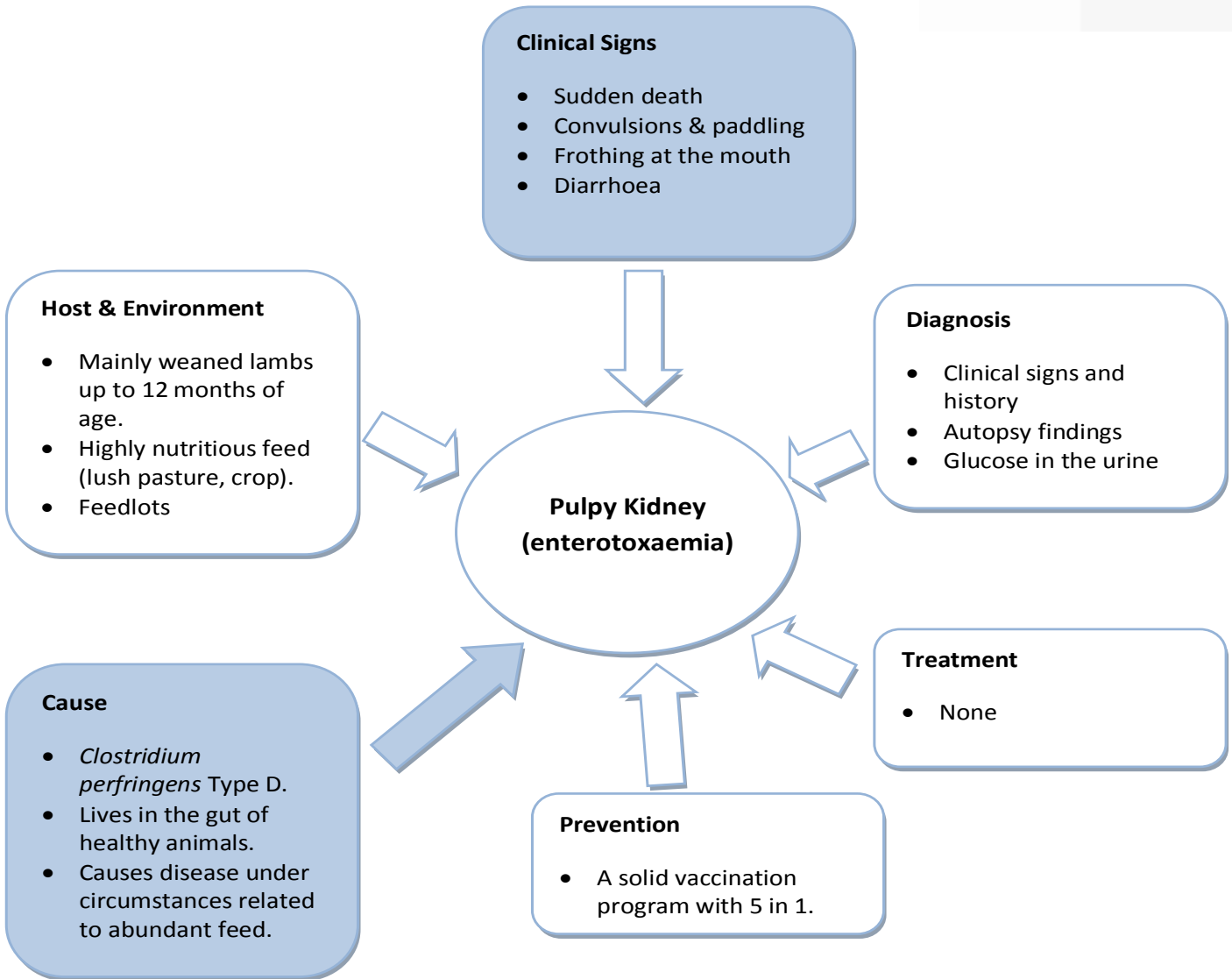
Please contact your local Ranger for assistance with any of these options.

Caught on camera! Motion sensor camera technology available at the North West LHPA monitors feed uptake.

Pulpy kidney is causing deaths (as usual)

Pulpy kidney (enterotoxaemia) has been diagnosed on a number of properties throughout the north-west in recent months. It is a common disease of dorper, first and second cross lambs on good pasture. It also occurs occasionally in Merino lambs and on less favourable pastures. It is common in lamb feedlots.

The diagram below shows the main features of the disease.



Large outbreaks do occur, so a solid vaccination program to prevent pulpy kidney is both economic and prudent. For merino lambs grazing dry pasture, vaccinating with 5 in 1 vaccine at marking (which also covers tetanus) followed by a booster at weaning is probably all that is required. In contrast, rapidly growing Dorset cross lambs grazing lucerne or oats (or in a feedlot) will require vaccinating at marking, followed by a booster 4 – 6 weeks later and a further booster every three months.

Contact your District Veterinarian for a vaccination program to suit your enterprise.



Often the first sign of pulpy kidney - lambs that suddenly die.

Note: The information contained in this newsletter is of a general nature only and does not constitute specific advice. For all queries relating to livestock health or pest animal control, please contact your local North West LHPA office.

Fox numbers explode

Many landholders are reporting the highest fox numbers for decades. The North West LHPA has issued 26,847 fox baits in the last 3 months, representing an increase of 30% during the same time period in 2010.



Did you know??? Adult foxes typically eat 300 to 450 grams of food per day. To assist landholders in controlling these pests, the North West LHPA now supplies manufactured baits free of charge (conditions apply). This is in addition to fresh meat baits injected with 1080 concentrate, also supplied free of charge where the meat is provided by landholders.

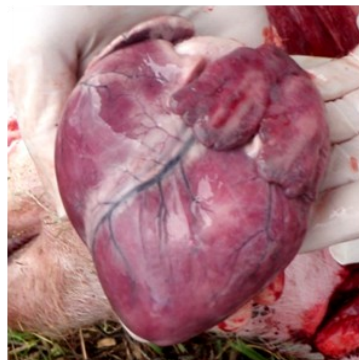
Contact your local Ranger and get your neighbours involved. Remember the wider the area baited, the longer it will take for reinvasion.

Backyard Pig Problems: Encephalomyocarditis (EMC)

Apart from a mouthful, what is encephalomyocarditis? It is a viral illness of young pigs spread by rodents and there have been recent cases in the North West LHPA. As the 'carditis' part of the name suggests, it produces heart failure.

EMC typically affects recently weaned pigs. It is a particularly serious infection and there is no cure. Most pigs that contract the infection will die. EMC occurs most commonly in smaller and backyard piggeries.

So what can you do to minimise the risk? There is no vaccine in Australia for EMC. The virus is transferred by rat and mouse urine. So covering up all feed and watering sources combined with good rodent control is essential.



Your local North West LHPA office can assist with rodent control and disease investigations if you have any concerns regarding pigs.

White patches on the heart typical of EMC virus.

Slow calving on green pick? Supply magnesium.

A common complaint in the North West LHPA is that of calving losses due to slow or "lazy" calvings. This situation classically occurs in winter when calving cows are grazing a short green pick (with or without dry standing feed). It also occurs in cows grazing cereal crops. Affected herds often suffer several cases.

This syndrome is characterised by cows failing to deliver normal sized calves within the standard timeframe for an average birth (4 hours, or a bit longer for heifers). If assistance is given, the calf can often be pulled with minimal effort. Observations that the cow has failed to fully dilate, or just wasn't pushing are also common.

It is likely that many of these slow calvings are due to a marginal hypocalcaemia (low blood calcium). While the hypocalcaemia is usually less severe than that which causes classical milk fever, it can be associated with a wide range of problems including calving difficulties. This is because low blood calcium reduces the contraction strength of the uterine muscles. Weak contractions can result in slow calving, leading to calf deaths and a variety of cow problems including calving paralysis, retained membranes and death.

However, despite its name, this hypocalcaemia is not due to a deficiency of calcium. Rather it is a hormonal problem. Cows have massive stores of calcium in their bones - more than enough for the needs of a growing calf and early lactation. In fact, feeding extra calcium to near-calving cows actually worsens the hypocalcaemia as it decreases the ability of the cow's metabolism to pull calcium from her bones.

The critical micro-nutrient for correcting the problem is magnesium. Magnesium assists the cow in mobilising her bone calcium reserves. Unfortunately short green pick is not only low in magnesium, it is also high in potassium which interferes with magnesium absorption from the rumen.

Luckily this imbalance can be easily overcome by the feeding of a magnesium and salt lick. Feeding out a loose lick of 1:1 salt to magnesium oxide (Causmag®) should prevent problems in those herds at risk.

Pic: Brian Cumming, DPI NSW

