

*NSW Agriculture & Rural Lands Protection Boards****ANIMAL HEALTH SURVEILLANCE REPORT****November 1994 – January 1995*

*Contributions to this Report are warmly welcomed.*

*Please submit them as Wordperfect documents on disk or to the COMMON area on the Agnet computer, DEEP.*

**Livestock and Pastoral Conditions**

The first indications that large parts of NSW may be nearing the end of the drought came around Christmas with good rains in the north and central parts. Since then widespread rains in January have brought good pasture growth and restored water supplies in most areas. Ninety percent of NSW remains drought declared for February but continued mild weather and some follow-up rain should see a great reduction in the drought declared area for March. Some districts like the Upper Hunter and the far south west have received only light rain and are still short of feed and water.

**Disease Trends and Predictions**

The increased moisture also favours certain pests and diseases. Internal parasitism, and particularly *Haemonchosis* in sheep, may increase and owners should be advised to monitor their sheep to see if a specific Barber's pole treatment is required in the southern and central parts of the State.

Paralysis ticks continue to worry cattle on the north and central coastal areas and infestations of *Haemophysalis* ticks have been reported from other areas as well.

Poisonous plants, fungi and accumulations of nitrates and cyanogenetic glycosides in pasture and fodders may also cause health problems.

The dry early summer allowed considerable progress on footrot eradication in sheep flocks but conditions are now suitable for transmission in many areas. This will test whether eradication has been successful, especially of low virulence strains. The conditions may also allow breakdowns to be detected where infected sheep have unwittingly been introduced during drier times.

## Investigations of Suspected Exotic Diseases

A horse in Braidwood district was notified by a practitioner as a possible Acute Equine Respiratory Syndrome case. This was quickly diagnosed as a routine pneumonia with quick recovery after antibiotic treatment.

### Suspected avian influenza outbreak

After an outbreak of avian influenza in a commercial layer chicken flock outside Brisbane at Christmas, a mortality in broilers in two of 3 sheds on a north coast farm was investigated and rapid fluorescent antibody screening test results at AAHL suggested that avian influenza virus may have been the cause. The birds were ready for slaughter so prompt action had to be taken either to allow commercial slaughter, and to control possible extension of the outbreak, or to depopulate the sheds. Fortunately all other serological and virological tests for AI were negative. Mortality rates settled down in response to cooler weather and the birds were then permitted to go for processing. Shed disinfection was undertaken before restocking with the next batch of day old chickens. (Contact: Ian Bell, Orange, 063-913 691)

### Suspect pulmonary adenomatosis

There was suspicion of jaagsiekte or pulmonary adenomatosis, a severe proliferative, tumour like response in the lungs, from a Texel weaner examined at RVL Wagga. This condition is caused by a retrovirus and is a problem in sheep in Europe and South Africa. Fortunately, AAHL ruled out jaagsiekte as the animal involved was only 8-months old and the lesions lacked sufficient adenomatosis. A search of RVL data bases and a retrospective examination of retained histopathology material from cases of lung disease in Texel sheep, submitted to the laboratories in 1994, gave further confirmation of the absence of jaagsiekte in NSW. (Contact: John Glastonbury, Wagga, 069-381 929).

## Significant Disease Events

### Anthrax

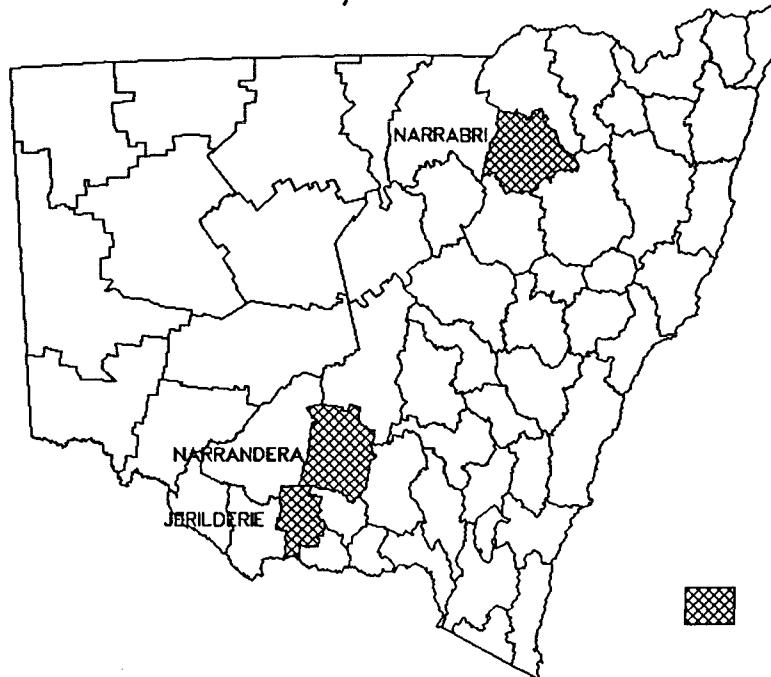
During November to January, anthrax was confirmed on 3 properties in the Narrandera district, one in each month. On two properties at Yenda 20/500 and 30/1500 sheep died. At Merriwagga, 15/1000 sheep died within 3 days of moving into a cropped paddock and 4 cattle died within a day of moving out of it. Vaccination controlled each outbreak. Cyanamid-Websters have taken a cautious approach to releasing vaccine and have stocks in hand for outbreak control and for preventive vaccination in high-risk situations. Vaccine is being released on the recommendation of DV's.

A Coonamble grazier presented himself to the local DV with a malignant pustule diagnosed as anthrax by a local medical practitioner. Investigation of livestock deaths (small numbers of sheep, cattle and a dog) failed to confirm that any of these deaths on the drought affected property were caused by anthrax.

Culture of pustular skin lesions in three people who drenched wet sheep in the Coonamble district yielded a *Bacillus* species in a commercial medical laboratory. NSW Health is assisting investigations to assess if it is indeed *B anthracis*. The property has no recent history of anthrax. (Contact: David Kennedy, Orange, 063-913 626)

# Districts Reporting Anthrax

July–December 1994



## Chalkbrood Update

Chalkbrood was first detected in Australian bees in southern Queensland in 1993 and has since spread into south-eastern Australia. Little can be done to control the spread of the infection. Recent outbreaks have been detected in the Bathurst district and Moss Vale districts bringing the total number of affected localities in NSW to twenty-nine. The bee industry is being advised of the infected localities so that bees can be sourced from other areas for live export. (Contact: Keith Oliver, Orange, 063-913 852)

## Enterotoxigenic *E coli*

Awareness of Haemolytic Uraemic Syndrome in people has increased in recent years with the "Jack-in-the-Box" hamburger incident in the USA and with the January outbreak associated with a metwurst sausage in South Australia. Strains of *E coli* implicated in HUS are rarely isolated from animals, however an O157 isolate, which was positive for verotoxin, was isolated from the faeces of a calf in northern NSW. Several others in the mob of 120 early weaned calves had died or exhibited persistent diarrhoea and pneumonia. A national strategic plan to deal with this and other verotoxigenic *E coli* is being developed currently. David Jordan, VO Queanbeyan, will be undertaking a PhD on the problem at the University of Guelph in Canada. (Contact: Bob Coverdale, Armidale, 067-701 801 or Stuart King, Maitland, 049-302 415).

## Johne's Disease

A cow imported from Canada to central NSW had been confirmed last year as being infected with *M paratuberculosis*. Her 12-month old calf which was also euthanased and investigated had suspicious intestinal lesions and has also cultured positive. Testing of the

herd has found no further evidence of infection.

*M paratuberculosis* was also isolated from one of the rare black rhinoceros at Western Plains Zoo which was suffering from chronic weight loss and diarrhoea. Thickening of the intestines was found on rectal examination and the animal is currently being treated with expensive anti-mycobacterial drugs to try to control the infection. The isolate has been sent overseas for further characterisation. This isolation poses no threat for commercial livestock as all animals in the zoo are effectively under continuous quarantine.

Since the last Report in November, progress has been made on resolving voluntary herd classification or market assurance programs for cattle and alpaca. The Animal Health Committee's working party met with representatives of the cattle industries and Australian Alpaca Association in December and it is hoped that the programs will be finalised early this year. It was noted at the meeting that no new cases of infected alpaca have been detected since mid-1994, increasing confidence that the only spread to alpaca so far has been on one property and that adult alpaca may be resistant to infection. However alpaca are still at risk of being infected by other species. (Contact: David Jordan, Queanbeyan, 06-297 1861)

Two further ovine JD flocks were detected in the central tablelands, in the Bathurst and Carcoar districts.

#### **Footrot reintroduced to Bourke**

Last year footrot was eradicated from the Bourke district after a concerted and coordinated effort on the last known infected flock. Unfortunately, in January, one of 3 mobs of sheep introduced unseen from western Victoria to a stock reserve near Bourke in the Footrot Protected Area was found to be infected with footrot on arrival. Sound fencing, an absence of sheep on neighbouring paddocks and prompt action by the owner, veterinary officer and RLPB ranger has ensured that the area remains free of known footrot. All sheep were ordered for slaughter within the week. (Contact: Eric Davis, Bourke, 068-722 077).

## **Disease Surveys and Studies**

### **EBL Update**

The herd prevalence for enzootic bovine leucosis in NSW dairy herds continues to fall. In the year to mid-1994, 30% of herds were found infected but at the November round of bulk milk testing, only 18% of 1938 herds tested positive. EBL negative herds however need to continue to protect themselves when purchasing replacements by demanding vendor declarations and/or individually testing animals. (Contact: Richard Zelski, Maitland, 049-302 419).

## **Developments in Disease Recording and Reporting**

### **Fieldvet2**

The revised version of the field disease recording system, *Fieldvet2*, was released to RLPB district veterinarians during December and January. The new system operates in *Epi Info* version 6 and allows greater flexibility for DV's in recording summary details of all disease events as well as more information on important diseases such as anthrax and Johne's disease. (Contact: Evan Sergeant, Tamworth, 067-665 654)

George Perry, DV Walgett, in conjunction with Greg Curran, SFVO Cobar, has developed a standardised Lice Reporting system, designed for use by Western Division Rangers. The format is also suitable for statewide use and compatible with the National Woolstore Survey. The system includes reporting forms for a database incorporated into *Fieldvet2*. (Contact: George Perry, Walgett, 068-281 047)

### *Labsys*

During 1994, *Labsys* records indicate the veterinary laboratory network processed in excess of 291,000 individual specimens. The actual number of tests performed is greatly in excess of the above figure because many specimens require multiple tests. When *Labsys* is fully operational individual test information will be readily available. The specimens are divided into a number of broad groups in the *Labsys* accessioning as follows:

<i>Specimen Type</i>	<i>Number of Samples</i>
Blood	150,999
Faeces	66,177
Milk	30,911
Fresh Tissues	13,009
Formalised Tissues	13,210
Animals for Autopsy	5,927
Other Specimens	11,700

The total specimen intake at the four country based RVL's was very similar as is shown below. The figures for EMAI include the RVL Menangle and the CVL's.

<i>Laboratory</i>	<i>Number of Samples</i>
EMAI	101,001
RVL Wagga	48,702
RVL Orange	48,621
RVL Wollongbar	47,771
RVL Armidale	46,623

### *Getting Information on the Occurrence of Animal Diseases*

*This surveillance report can only convey a very limited amount of information about the occurrence and distribution of livestock diseases in NSW. If you would like more specific information about diseases occurring in your part of the State, contact your local RLPB District Veterinarian or departmental Senior Field Veterinary Officer or Regional Veterinary Laboratory. For statewide information contact David Kennedy.*

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