New South Wales

ANIMAL HEALTH SURVEILLANCE

May–June 1995

Number 95/3

Livestock and Pastoral

For most of May and June weather conditions were mild with useful rain in many areas. On the north coast, pastoral conditions and stock water supplies improved greatly but, with the drier and cooler conditions of winter, pasture quality invariably deteriorates. Over half of the State is still officially drought affected as pasture response has been generally slow in most inland and southern areas. Pastures have been heavily grazed and toxic plants such as Patterson's curse and capeweed are common. Stock are slowly improving in condition.

Pastures in the north of the Western Division have consolidated and stock have been agisted to the area. The more central areas of the Western Division, where good perennial growth occurred over recent years, still have reserves of dry grass and/or chenopod.

Disease Trends and Predictions

In central and southern regions, metabolic disease problems in both sheep and cattle will probably continue because the majority of feed consists of rapidly growing winter cereal crops and grass dominant pastures. Calving cows and lambing ewes will be at highest risk. Advisory activity has been undertaken targeting grass tetany prevention for cows and pregnancy toxaemia and hypocalcaemia prevention in ewes. The wet green feed and proliferation of weeds have also resulted in heavy losses from nitrate poisoning, phalaris poisoning and redgut on lucerne.

Surprisingly in the central–west, infestations of *Haemonchus* continued into the early winter, reflecting the late autumn break and mild conditions.

Deteriorating pasture has led to an increase in sporadic plant poisoning on the north coast. Bracken fern poisoning was suspected to have killed 10 animals in 7 herds and plant toxicoses were the likely causes of photosensitisation and ill–thrift seen in several cattle herds. Diarrhoea and weight loss has also occurred commonly on the coast associated with fascioliasis, nematodosis, coccidiosis, cryptosporidiosis, yersioniosis and salmonellosis, pestiviraemia and copper deficiencies. Diarrhoea in calves was also associated with drinking water contaminated with *Anabaena* algae. *(Contact: Paul Gill, Wollongbar, 066 240 298)*

Significant Disease Events

Introduction of Cattle Tick

Mature cattle ticks (*Boophilus microplus)* were identified in May on two thoroughbred horses that had returned to the Young district in southern NSW after a 4–day trip to the tick infested area of south–east Queensland. The horses were introduced into NSW legally and received a single treatment as required at the border. Resistance to tickicide is being investigated. Inspections of other horses, cattle and sheep on the NSW property did not detect any more ticks. A meteorological station has been established on the property and weather conditions have been hostile for cattle tick. A sentinel group of cattle is being maintained in the horse paddocks to detect any reinfestation. *(Contact: Stephen Ottaway, Orange, 063 913 854)*

Ovine Footrot Strategic Plan

Continuing progress with the eradication of footrot from large areas of NSW was confirmed by the gazettal of new Protected and Control areas at the end of May (see attached map). The most important advances are that all of Condobolin and the majority

of the Moss Vale districts are now Protected Areas and most of the Dubbo district is now a Control Area. The only part of the Orana region still a Residual Area is south east of Wellington in the Dubbo district. *(Contact: Rob Walker, Wagga, 069 230 463)*

Johne's Disease

The National Farmers Federation has convened a National Coordinating Committee to supervise development and implementation of a national strategy covering all aspects of JD control in cattle. The Meat Research Corporation and the Dairy Research and Development Corporation have recently advised that they will fund education programs for the cattle industries and training programs for veterinarians involved in the National Johne's Disease Market Assurance Program. The NSW Cattle JD Steering Committee met in June and has undertaken to support the implementation of the national program in this State.

Final endorsement of the NJDMAP awaits clarification of the use of herd statuses for interstate movements and the inclusion of a stream that will accommodate large beef herds with no previous history of disease.

So far this year 7 new properties have been confirmed infected on the far north coast; 2 in Lismore and 5 in Casino RLPB's, 4 dairies and 3 beef herds. The Orana region on the other hand has no known JD in any species and hopefully the NJDMAP and associated programs will help producers in such areas reduce the risk of importing JD. JD policies for cattle and alpaca in NSW are currently being developed. *(Contact: David Kennedy, Orange, 063 913 626).*

Another 4 new sheep flocks were confirmed to be infected in the Bathurst–Carcoar districts during the period. Representatives of the national sheep industry met in June to review the OJD situation and resolved that the industry should take immediate action to control and eventually eradicate the disease from the Australian flock. *(Contact: Laurie Denholm, Orange, 063 913 863)*

Anthrax

Although certification for export of goat meat from the Nymagee area to Mauritius could not be provided because of an anthrax outbreak in that area earlier in the year, several overseas markets have been assured that the media publicity in May was unwarranted. After a series of 11 widely distributed incidents during the first four months of the year, no further cases of anthrax were confirmed until the end of June, when 4 of 140 cattle died in an endemic area of the Narandera district.

Anthrax was excluded in a sudden mortality involving 6 of 150 head of cattle on agistment at Gulargambone and also in the deaths of 2 ex 150 Friesian diary cattle at Dubbo. At Coonamble 14 deaths in a mob of 200 mixed cattle are considered to be due to botulism after smears were negative for anthrax. *(Contact: Laurie Pryde, Dubbo, 068 811 275).*

Deaths in pregnant cows

In western NSW, several reports of deaths in late pregnant, calving cows agisted from eastern areas of the State have been received. Affected animals have usually been trucked to agistment in late pregnancy from drought feeding. The stress of transport, change in feed, and the heavy nutritional demands of late pregnancy have contributed to collapse and death. In one case at Wanaaring, 9 of 180 cows have died.*(Contact: Greg Curran, Cobar, 068 362 108)*

North Coast Reporductive Failures

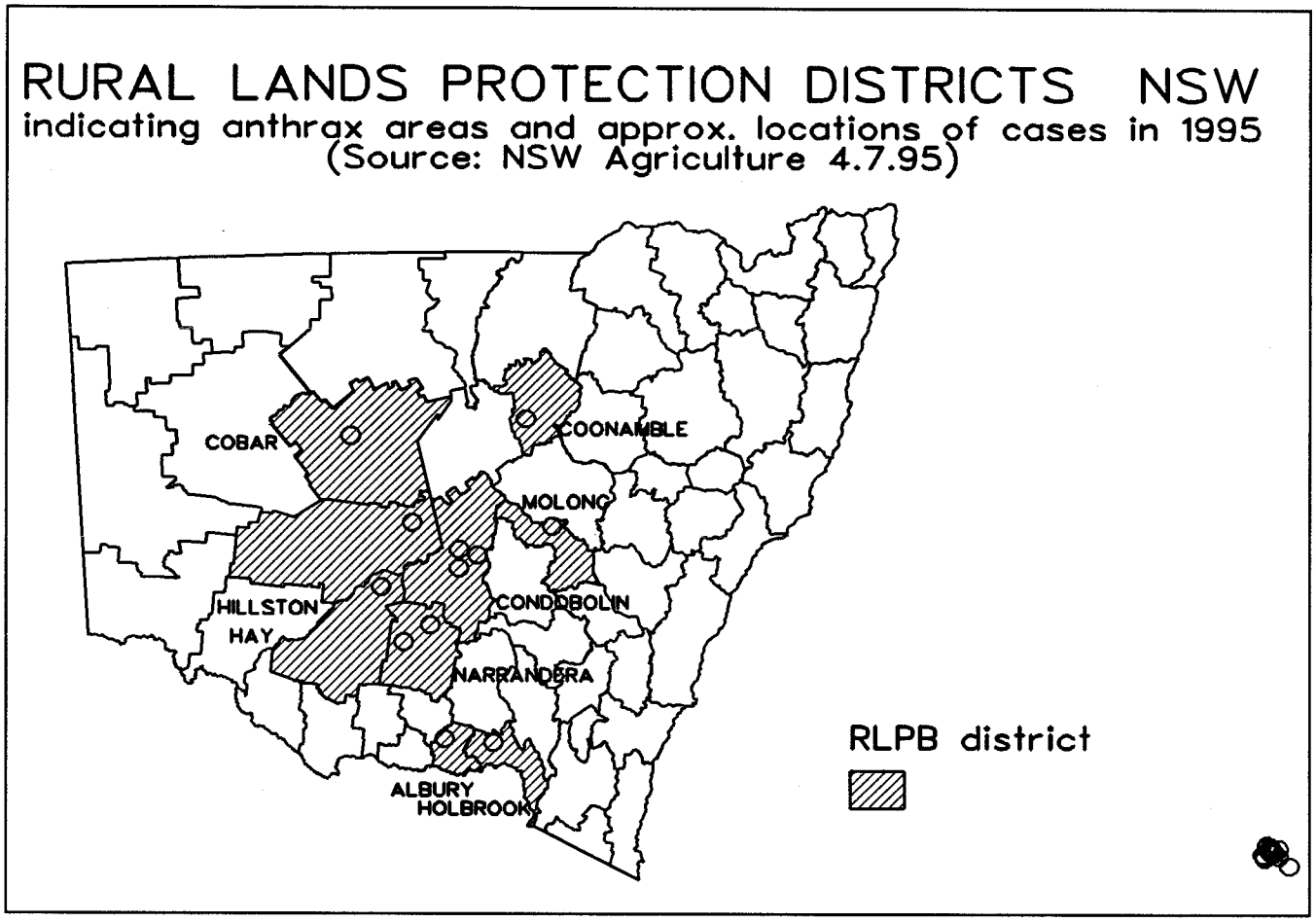
Positive reactions to the vaginal mucus IgA ELISA for *C. fetus veneralis* were commonly found in investigations of returns to service and abortions in beef herds in Casino, Lismore and Kempsey districts and in a dairy herd with abortion in Lismore. *Neospora* abortions continue to be diagnosed and cases of akabane disease are expected with the spring calving. *(Contact: Peter Harper, Grafton, 066 420 467)*

Disease Surveys and Studies

Buffalo Fly and Dung Beetles

Despite moderate buffalo fly infestations in the Tweed Valley, there were minimal incursions elsewhere, so that the MRC funded Agrisearch Resistance Monitoring project could not be completed this season.

A recent survey of dung beetles by Soilam Pty Ltd determined low level activity only in 31 of the 89 sites, possibly due to drought. There had been excellent beetle activity in Grafton, but this has now practically ceased with the onset of cooler weather, suggesting the need of the introduction of more cold tolerant species (eg *Onitis aygulus*) to the region. *(Contact: Peter Harper, Grafton, 066 420 467)*



Assessment of Risk of Flood Plain Staggers

In the Western Division, it was feared that recent rains, following the drought, would have increased germination of blown grass (*Agrostis avenacea)* and the resultant risk of outbreaks of floodplain staggers. Inspections by NSW Agriculture staff and a South Australian researcher on the Bogan River found no blown grass. Near Brewarrina, however, young seedlings were common among other more strongly growing species. Heavy winter rains and inundation in this area would favor *Agrostis* dominance and increase the risk of flood plain staggers occurring. Further inspections will be undertaken in July. *(Contact: Greg Curran, Cobar, 068 362 108 or Danny Norris, Bourke, 068 722 077).*

National Arbovirus Monitoring Program

The 1994–95 season's sentinel herd testing was completed in June. Seroconversions to akabane virus on the north coast were later this year, not occurring until March at Lismore. Seroconversions to palyam virus also occurred on the far north coast in May. There was an isolated seroconversion to bluetongue virus on the north coast but none to ephemeral fever viruses despite confirmed cases in the Narrabri district. *(Contact: Peter Kirkland, Menangle, 046 293 333).*

Neospora Abortion Research

Faecal collections from carnivores on properties with a history of neospora abortion has been arranged with kits provided by the RVL Wollongbar. The samples will be examined for oocysts and eventually by PCR for *N.caninum* at Sydney University and University of Technology, Sydney. *(Contact: Peter Harper, Grafton, 066–420 467)*

Choroid blindness in kangaroos

During 1994 and 1995, several thousand kangaroos in inland areas of south eastern Australia have been blinded by a disease characterised by retinitis and choroiditis. Two strains of orbivirus, Wallal and Warrego, have been isolated from cases in Victoria and NSW. These viruses have previoulsly been isolated in *Culicoides* midges. The distibution of the disease along major western rivers in 1994 had suggested that it might be caused by an arbovirus but it is not yet known if the two viruses are involved or are only incidental findings. Investigations are continuing. *(Contact: Greg*

Curran, Cobar, 068 362 108 or Gary Reddacliff, Menangle, 046 293 314)

Choroid blindness was suspected in a kangaroo well east of the known distribution, at Grafton, but its blindness was found to be the result of bilateral cataracts.

Salmonella abortus ovis investigation

This bacteria, which had previously been thought to be exotic to Australia, was isolated from 2 children and from a batch of kangaroo meat from western NSW last year. It had not been identified in outbreaks of sheep reproductive disease and intensive investigation of a suspect sheep flock last year failed to find the organism. Recent studies of the human and kangaroo isolates overseas have found that they are the same strain but are different to the overseas bacteria in two important features, the virulence plasmid and a specific genetic sequence. This may explain why the infection has not been asociated with reproductive disease in Australian sheep flocks. *(Contact: David Kennedy, 063 913 626)*

Developments in disease recording & reporting

Animal diseases and world trade

Approximately 70 people attended a seminar at EMAI by Dr John Wilesmith from the Central Veterinary Laboratory at Weybridge in Britain on bovine spongiform encephalopathy and the impact of animal health on international trade. He reaffirmed the importance of our current efforts to improve disease recording to support certification for international trade, an important issue for District Veterinarians and their record systems.

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Contributions to this Report are warmly welcomed. Please submit them as Wordperfect 5 documents by electronic mail, on disk or to the COMMON area on the Agnet computer, DEEP.

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.

NSW FOOTROT PROTECTED, CONTROL & RESIDUAL AREAS