

ANIMAL HEALTH SURVEILLANCE

January - April 1996

Number 96/1

Livestock and Pastoral Conditions

Feed availability has been good to excellent in the New England area, and improving from earlier feed deficits in the Hunter after good warm season rain. The northern coastal belt has had abundant pasture growth bring the best growing season for cattle (and weeds) for several years; while the central and northern plains have had patchy feed availability. Southern areas have fair to good pastures, while the northwest semi-arid country has areas with some major feed deficits. The far west has fair to good pasture. The March-April transition from northern tropical to southern ocean systems has brought some early cool season rain to the south.

Disease Trends and Predictions

The northern coastal areas has had continuing Bovine Ephemeral Fever, Pink Eye, Buffalo Fly incursions, Clostridial Diseases, Mineral Deficiencies and Endoparasitism. A plethora of cattle reproductive diseases (Campylobacteriosis, Neosporosis, Leptospirosis, Pestivirus and mineral deficiency complex) seen in recent months may continue as beef producers examine the performance of their breeding herds.

With increasing awareness of *Johne's Disease* in both cattle and sheep, the disease is expected to be diagnosed more frequently, with requests for clarification of status becoming more frequent.

In some areas, there has been a prolific growth of rock fern, and poisonings can be expected without good autumn rains.

Investigations of Suspected Exotic Diseases

Equine disease surveillance

Equine morbillivirus is being considered in investigations of mortalities of horses around NSW.

The deaths of three Thoroughbred weaners from acute respiratory disease at a large stud near Wellington over a two week period is being investigated as a low probability EMV case. Histopathology and serology have been negative. The possibility of EMV in the case of sudden death of a horse in the Maitland district, from cardiovascular collapse and dyspnoea. Whitewood poisoning was suspected. Exclusion testing for EMV proved negative. (Contact: Laurie Pryde, Dubbo, 068 811 275; Peter Cosgrove, Wellington, 068 451102).

Significant Disease Events

Tuberculosis Eradication at Bourke

Following an abattoir traceback, a Bourke herd was completely destocked after tuberculin testing confirmed TB was present. TB lesions were found in 84 of 202 (42%) animals post-mortemed. The tuberculin skin test detected 82% of animals confirmed as infected. Of 124 animals examined that were tested negative, 15 (12%) were found to have lesions. It is believed that TB may have spread quickly within the herd from a single infected animal that escaped detection in previous TB testing in the 1970s. All neighbouring herds have now been tested, without no tuberculosis confirmed. Disease tracing has not found any further cases. (Contact: Roy Everett, Orange, 063 913 719).

Bovine Ephemeral Fever Widespread in Northern Areas

Widespread severe Bovine Ephemeral Fever and Pink Eye have accompanied a wet season with significant insect burdens on northern coastal areas. BEF was also suspected from many herds in the New England (79 reports to end February), the Hunter Valley, and the northern and central plains, and to southern NSW to a lesser extent. Cases can resemble SBE, but District Veterinarians and practitioners are recognising significant differences to those usually seen in SBE. To late March, there has been only one confirmation of the diagnosis of BEF. There have been very few reports of mortalities in these outbreaks.

(Contact: Eric Davis, Armidale, 067 701 818; Peter Harper, Grafton, 066 420 467; Laurie Pryde, 068 811 275).

Rabbit Calicivirus Spread Apparently Ceases

Continued monitoring by RLP Board staff and NSW Agriculture has found no new cases of the disease in NSW over summer, but the disease was reported in late April near Deniliquin, possibly associated with an outbreak in central Victoria. Ways to achieve maximum effect from a planned release are being discussed at a national level.

(Contact: Graeme Eggleston, Orange, 063 913 683).

Anthrax

A human case of *anthrax* was confirmed from the Griffith-Rankin Springs area; investigation failed to locate associated cases in animals.

The Anthrax policy circular was released early in December, the end result of work performed by Laurie Pryde, Dubbo and David Kennedy, formerly at Orange. (Contact: Laurie Pryde, Dubbo, 068 811 275)

Pimelea Poisoning in Western NSW

Pimelea poisoning (formerly known as St George Disease or Marree Disease) is occurring over a belt of country from Broken Hill, Menindee, Emmdale to north of Cobar, in areas to the south where it is most often seen. A new vaccine, an antidote, and a treatment are being trialed in South Australia this year near Marree as part of a national research program.

(Contact: Greg Curran, Cobar, 068 362 108; Michael D'Occhio, CSIRO Rockhampton, 079 360174).

Disease Control & Quality Assurance Programs

Johne's Disease in Cattle

NSW Agriculture and the cattle industry have begun a program to control Johne's Disease. A national Johne's Disease market assurance program is being coordinated in all States. (Contact: Tim Jessep, Goulburn, 048 230 744; David Kennedy, Orange, 063 656 016)

Controlling Residues in Livestock Product

Being able to market clean meat and wool is as important as having healthy animals. Veterinarians around NSW are contributing their knowledge of livestock production systems and epidemiological skills to help producers deal with a wide variety of residue issues.

Testing for Helix (CFZ) residues has shown they have been greatly reduced or eliminated from most herds.

(Contact: Dan Bryne, Tamworth, 067 631 103)

A national program (NORMP) to keep *organo-chlorine residues* under active surveillance has been implemented. Properties are being classified and audited according to risk.

(Contact: Sally Spence, Wollongbar, 066 240 214)

Internal Parasite Control Programs Tested

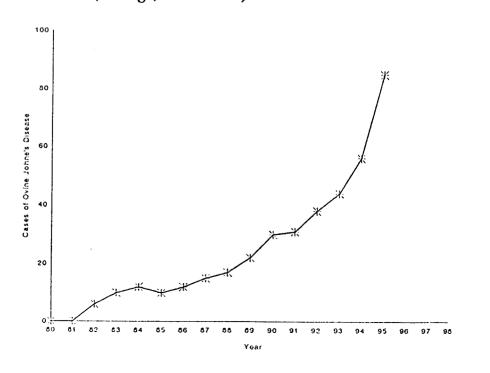
The adequacy of *sheep worm* control programs is being tested on the New England Tablelands and northwest. Most failures reflected people not following the basics of worm control strategy, not using effective drenches, and lack of parasite burden monitoring. Strongyle worm egg counts in January 1996 at Armidale RVL were relatively high, with 60 of 140 (43%) Wormtest results averaging over 500 epg, compared with 13 of 160 (8%) in January, 1995, and 53 of 141 (38%) for January,

1994. Cultures of worm eggs indicate a slight rise in Haemonchus. (Contact: Eric Davis, Armidale, 067 701 818)

Disease Surveys and Studies

Trends in Ovine Johne's Disease

A review of Ovine Johne's Disease in NSW indicates that the number of known infected flocks has begun is increasing logarithmically. See figure. Extrapolations indicate that there will be a minimum of about 190 cases by year 2000. As the actual current prevalence of the disease is believed to be higher, and detection will improve with increased disease surveillance, there may be 600 to 1200 known infected NSW farms by year 2000 if the disease is not actively controlled. (Contact: Laurie Denholm, Orange, 063 913 851)



Arbovirus surveillance

Seroconversions to the Simbu Group of viruses have been found in some animals in National Arbovirus Monitoring herds in northeastern NSW. No seroconversions to Bovine Ephemeral Fever and Akabane have been seen in these herds yet, but were expected in March/April samples. (Contact: Peter Kirkland, Camden, 0496 293 333)

Animal Health Research

Neosporosis

This protozoal disease remains a significant threat to reproductive performance, particularly in dairies. A review of diagnoses of protozoal abortion at Wollongbar RVL found the disease was common. See table. Between 1993 and 1995, 69% of cases were associated with outbreaks of abortion, where 3 or more cows had aborted in the previous 2 months. A Neospora Research Group was established in April to progress research.

(Contact: Peter Harper, Grafton, 066 420 467)

	Year		1993	1994			1995		
Board	Dairy	Beef	Total	Dairy	Beef	Total	Dairy	Beef	Total
Tweed-Lismore	0	0	0	3	1	4	0	0	0
Casino	4	2	6	5	2	7	1	1	2
Grafton	2	4	6	7	1	8	3	1	4
Kempsey	7 .	1	8	4	2	6	3	2	5
Gloucester	9	1	10	2	1	3	1	0	1
TOTAL	22	8	30	21	7	28	8	4	12

Viral Blindness in Kangaroos

A national effort to determine the cause and epidemiology of blindness in kangaroos has found that insect-borne viruses, belonging to the Wallal group, are causing the disease. The disease has been reproduced in normal grey kangaroos at Elizabeth Macarthur Institute near Camden which were exposed to viruses isolated from field cases in western NSW, Victoria and South Australia. Lesions appeared weeks or months after inoculation. A national serological survey found the viruses involved are common in affected areas, with (50 to 90)% kangaroos exposed. The disease is far less common, with about 3 % of grey kangaroos becoming blind. Red kangaroos and euros have shown the disease at a much lower prevalence than greys. No livestock have developed the ocular disease.

(Contact: Leslie Reddacliff, Camden, 046 293 333)

Developments in Disease Recording and Reporting

Fieldvet's programmer recognised nationally

Most District Veterinarians around NSW are recording disease investigations in Fieldvet, a computerised system developed by Tamworth Rural Lands Protection Board's Evan Sergeant, and NSW Agriculture. Evan has been seconded to the Bureau of Resource Science in Canberra to work on national animal health information systems.

Reporting of NSW Animal Health to National Disease Authorities

Animal disease information for 1995 from District Veterinarians and other veterinarians around NSW has been collated as part of the Australian report to our international trading partners. (Contact: Greg Curran, Cobar, 068 362 108).

Greg Curran Senior Field Veterinarian NSW Agriculture PO Box 286 COBAR NSW 2835

30 April, 1996

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 NSW Agriculture's Quality Assurance and Animal Health Program in Orange (063 913 237).