NSW Agriculture

NSW Agriculture & Rural Lands Protection Boards

ANIMAL HEALTH SURVEILLANCE REPORT

July - August 1993

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 Summary

In the Western Division most pastures in the northeast are dominated by potentially poisonous plants containing nitrate/nitrite and oxalates. Pastures in the balance of the Division are little changed with good balance of dry bulk and winter herbs.

Most parts of the Dubbo region have received good falls of rain which, with an associated reduction in cold weather, has improved the region's pasture situation. The whole of Dubbo and Coonamble districts were removed from drought declaration for August along with the eastern portion of Walgett. Districts remaining drought declared include the whole of Mudgee and Coonabarabran and the western part of Walgett and the north west part of Nyngan.

Little additional rain fell in the north of the State during August. However on the plains and lower slopes, pasture growth has been very good. Weather conditions on the New England have continued dry with many heavy frosts contributing to the lack of pasture growth. Pastoral conditions in the lower areas of Tamworth, all of Narrabri district and south west parts of Moree are good, however the rest of the district still needs further follow up rain/warm temperatures for sufficient pasture growth to alleviate drought conditions.

Good rains in the Hunter-Manning at the end of July and warm weather have stimulated pasture growth. Drought declarations for Denman-Singleton and Scone Districts were withdrawn for August. Merriwa continued as drought declared because cooler conditions had slowed pasture response.

Mild conditions persisted across the southern half of the State, with reasonable rain and greater pasture growth than normally expected over all but the far south-west. The Moulamein district will probably apply to have its two remaining divisions drought declared from September.

Disease Trends and Predictions

In the Hunter conditions associated with inadequate nutrition (including pregnancy toxaemia, fatty liver and plant poisonings) had been common but should ease with the improving pasture supply. Continuation of good conditions in the north-west will see more bloat, metabolic disease and enterotoxaemia on the plains. Continuing cold and frosty conditions on the northern tablelands and little pasture growth will result in increasing levels of pregnancy toxaemia as lambing approaches.

The rain and the pasture growth in the south have primed the environment but we have seen little activity with footrot. Temperatures were probably still too low however spread may start in September.

Internal parasites have been a major problem in the southern parts of the State. The surge in worm activity is the expected sequel to the wet summer restricting the effectiveness of the second summer drench earlier in the year.

Exclusions of Supected Exotic Diseases

Six exotic disease investigations were reported for the period:

* 4 suspected Newcastle disease or avian influenza incidents in birds,

* one supect sheep pox, and

* a supected vesicular disease in cattle.

In all cases, exotic diseases were quickly excluded by field and laboratory veterinarians. The most significant incident was an urgent investigation into a sudden and large scale mortality in pigeon and finch flocks near Wagga Wagga. This is now suspected to have been due to misadventure. *Contact: Ian Bell, Orange, 063-913691.*

Significant and Unusual Disease Events

Unusually alkaline urine precipitated bladder stones (urolithiasis) and caused heavy losses in a northern feedlot. About 200 cattle per week were having to be sent to abattoirs for salvage slaughter. In-feed medication to adjust urinary pH and minimise struvite stone formation corrected the problem within a fortnight.

St George Disease was seen in cattle near Tilpa on *Pimelea trichostaya* and *P.simplex*.

The most talked about disease condition in the north-west would be deaths due to bloat. As previously predicted, the wet weather and winter period has resulted in considerable growth of medics/clovers on the plains. With little standing dry feed diets are virtually all legumes. Large numbers of bloat capsules have been given to stock to prevent bloat while allowing them to utilise these productive pastures.

Poor lambings have been reported in many parts of the western division however the pattern is inconsistent with some properties having good results while neighbours are

marking only 30–60 percent. Some properties that had "Paroo Staggers" at the time of joining have been affected. These properties had excellent feed at joining, and generally had good feed for the previous lambing. Lamb marking percentages for those properties that had Paroo Staggers, and did or did not join during outbreaks, will be compared to see if there is a significant relationship between time of joining and lambing performance.

Sodium deficiency appears to have been the cause of an unusual nervous condition in a Dubbo dairy herd. The cattle were excitable and were easily "spooked" and stampeded.

Demyelination of the spinal cord indicated copper deficiency to be the cause of stillbirths and "dummy" calves born on a Coonamble district Santa Gertrudis herd. The dams had been introduced from the New England tablelands a few months prior to calving. Four of 25 calves died and another 2 had problems standing and sucking. (Note: Sentinel herd testing has indicated that akabane virus spread only on the north coast and lower Hunter this year.)

Surveys And Studies

Ovine Brucellosis

A survey of reproductive performance and ovine brucellosis was carried out in the Kikoira area near Lake Cargelligo with a view to forming an ovine brucellosis free area. Four of 36 flocks were infected, primarily involving Dorset rams. A group meeting to review results and decide on future actions will be held shortly. *Contact: Stephen Ottaway, Orange, 063–913854.*

E coli O157:H7

A national workshop in Canberra brought together medical and veterinary scientists to discuss the impact of the recent USA outbreak of pathogenic *E coli* food poisoning. The offending organism, *E coli* O157:H7, has been recorded in people in Australia on only 3 occasions since 1986. Recovery of the organism from cattle is rare overseas and none have been made in Australia. Medical surveillance will continue monitor the occurrence of this organism. *Contact: Stuart King, Maitland, 049–302444.*

Enzootic Bovine Leukosis

A survey of all NSW dairy herds by testing bulk milk for antibody to EBL infection was undertaken late last year. The bulk milk test can detect herds with more than 2% of milking cows infected. Overall, 22% of herds reacted to the test with the prevalences on the coast being 24% and inland, 12%.

Follow–up testing of individual cows in a sample of 25 herds in the Hunter and on the far north coast confirmed the bulk milk test's correct classification of herds as infected or not. In the 14 bulk milk positive herds tested, the prevalence of individual milking cows reacting to the test ranged from 1% to 32%. All 11 herds with negative bulk milk results had no cows react. It had been hoped that the strength of the test result on bulk milk would reflect the prevalence of infection within the herd, however the correlation was not strong.

Dairy farmers have been advised of their own results. The EBL *Agfact* has been updated and technical meetings have been held for veterinarians in dairying areas to help them assist farmers with EBL control and eradication. A steering committee has been formed

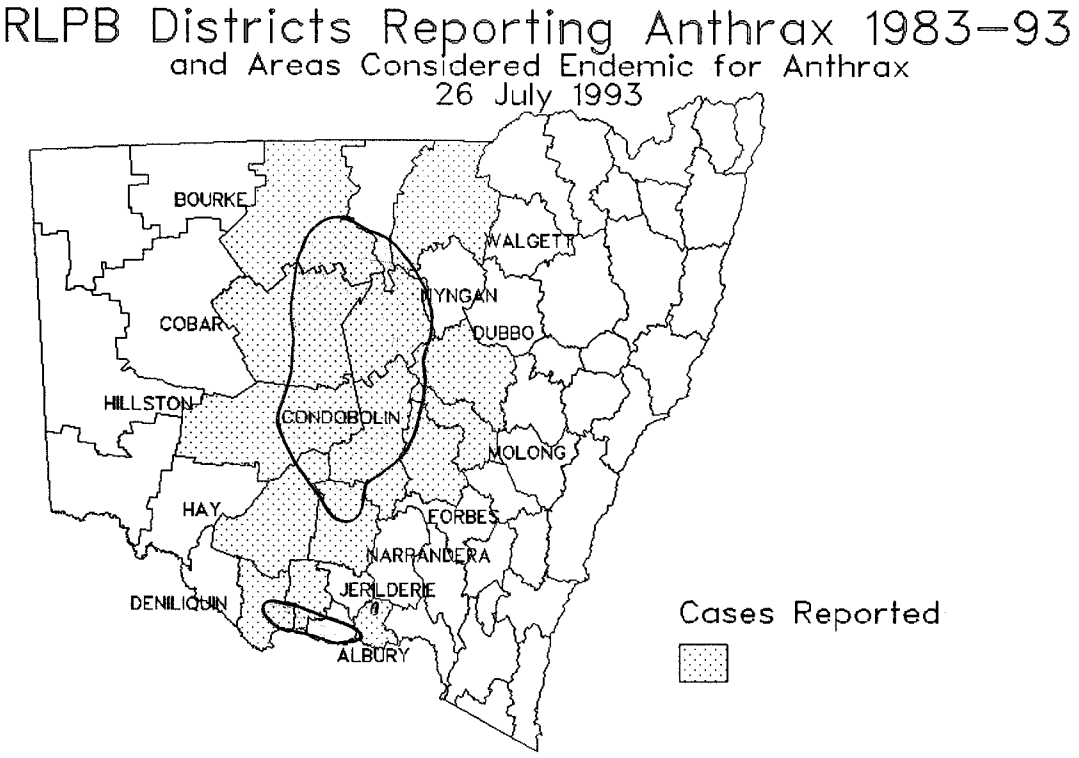
with the dairy industry to plan the eradication of EBL from NSW dairy herds. Bulk milk testing of all dairy herds will be undertaken quarterly to monitor EBL status. *Contact: Peter Kirkland, EMAI Menangle, 046-293333 or Richard Zelski, Maitland, 049-302419.*

Johne's Disease

In addition to the testing of NSW cattle herds which had been known to have had one or more cases of Johne's Disease, the microbiology laboratory at EMAI has also completed testing sera from nearly 4300 NSW cull dairy cows slaughtered at abattoirs late last year and early this year. The sera were the last to be collected for brucellosis surveillance and were an opportunistic attempt to better estimate the prevalence of Johne's Disease in dairy herds. David Jordan at Queanbeyan is currently undertaking an assessment of the current Johne's Disease situation in NSW cattle in light of these two studies. *Contact: Graeme Eamens, EMAI Menangle, 046-293333.*

Anthrax

Recently AQIS and exporting meat processors requested details of the current distribution of anthrax in NSW. This prompted a review of the area considered to be endemic for anthrax. The map on the following page illustrates districts in which anthrax had been reported since 1983 and the areas in which local veterinary staff consider anthrax is still endemic.



Occasional anthrax incidents will continue to occur outside these areas however it appears that the endemic areas are still contracting. For instance, anthrax was relatively common in the Coonamble district 20 to 30 years ago but is rare now. Changes in agricultural practice and soil chemistry and biology have probably made many areas less suitable for the survival of *Bacillus anthracis. Contact your local District Veterinarian or Senior Field Veterinary Officer.*

Developments in Disease Recording and Reporting

National Animal Health Information System

During July surveillance coordinators from Queensland, Western Australia, Tasmania, New South Wales and the Commonwealth met in Canberra with trade negotiators from AQIS to review NAHIS and to develop a new system. The first NAHIS report published and distributed earlier this year was a prototype which tested the States' and Commonwealth's abilities to collate data from various sources on 10 disease conditions. Some States had great difficulty providing the information and, where it was provided, formats were not consistent.

At the July meeting we attempted to identify information needs for national disease control programs and for trade certification and negotiations. Diseases of medium and high priority were identified and the format for information required for each was described. After much discussion we agreed to recommend to Animal Health Committee that the NAHIS

* comprise information on 35 diseases initially,
* reported quarterly in standard formats by the States, and
* published quarterly as a national animal health status report.

A national animal health report, including summary surveillance information, will also be published annually by the Australian Chief Veterinary Officer. Where possible information will be reported graphically.

Animal Health Committee will consider the group's recommendations next month and the first reports will be prepared for the July–September quarter. *Contact: David Kennedy, Orange, 063–913626.*

Epi Map

An easy–to–use mapping package that compliments *Epi Info* has been purchased and distributed around the State. As *Epi Map* is also a public domain program copies can be freely obtained from Senior Field Veterinary Officers and OIC's of Regional Veterinary Laboratories.

Epi Map was developed by the same team that developed *Epi Info* at the Centers for Disease Control in Atlanta. The program contains "boundary files" for areas to be mapped, such as countries and Rural Lands Protection Boards. Data to be mapped, such as the number of reports of a certain disease in each district, is contained in .REC files as used by *Epi Info*. Summary data can also be easily exported from *Epi Info* and mapped. Maps can be printed or exported as Wordperfect graphic files for incorporation in WP documents.

Laboratory Disease Recording and Reporting – *Labsys*

An intensive effort by Don Jones and Owen Elvery during the last few months in particular bore fruit on 4 August with the launch of the State's veterinary laboratory management and recording program, *Labsys.* They ran a successful workshop for staff from the 5 Regional Veterinary Laboratories, demonstrating the new program. Further improvements have been made during August and they will be installing *Labsys* at RVL's

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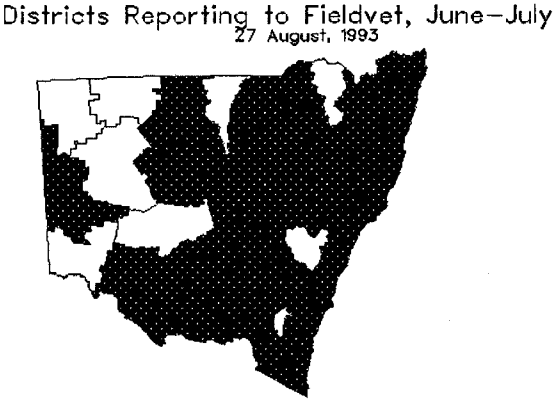
The new program allows improved management and reporting of laboratory accessions through a computer network as well as simpler reporting of activities, disease and charges for surveillance and for program management. *Contact: Don Jones, EMAI Menangle, 046-293333.*

Field Disease Recording and Reporting - *Fieldvet*

Some areas of western NSW have had property boundaries plotted in formats that could be used in *Epi Map* for plotting the distributions of major diseases lice, anthrax and footrot in the area.

For the months of June and July slightly fewer than 1000 disease records were incorporated into the statewide *Fieldvet* database (summarised below). Some problems were encountered in transferring data however these have been overcome and all Senior Field Veterinary Officers are submitting monthly data electronically to Orange. Summary data on the occurrence of diseases recorded in the *Fieldvet* database can be provided on request.



Further progress was made during the past two months in computerised disease recording by District Veterinarians and electronic reporting of disease events to SFVO's. All 6 DV's in the Dubbo region are now submitting their district disease information on disk for inclusion in the SFVO area report. The response by the DVs and their Boards to the initiative of using *Epi Info* for this purpose has been excellent. The system has now also been installed at Narrandera RLPB. Gundagai RLPB also has a computer available to be used for the system and, when it is installed, all DV's in the Wagga region will be recording their own disease information and reporting electronically. All but one of the 7 DV's in the Gunnedah region are now reporting electronically. Further improvements were made in Moree with the property database successfully uploaded from the Board's "Compurate" rating database.

David Kennedy
Program Leader Animal Health Surveillance
27 August 1993

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 Agriculture, Orange. Phone: 063-913626, Fax 063-631309.

Fieldvet
01/06/93 TO 31/07/93

SUMMARY OF REPORTS MADE FOR ALL SPECIES

SPECIES	CONF	SUSP	QUAR	RELD	OTHER	TOTAL
AVIAN	1	4	0	0	0	5
BEEF	149	107	0	0	1	257
CATTLE	56	57	0	0	0	113
DAIRY	49	27	0	0	0	76
GOATS	9	5	0	0	0	14
HORSES	1	1	0	0	0	2
OTHER	1	1	0	0	0	2
PIGS	13	5	0	0	0	18
POULTRY	0	1	0	0	0	1
SHEEP	335	154	8	1	1	502
TOTAL	614	362	8	1	2	990