



New South Wales



ANIMAL HEALTH SURVEILLANCE

July - September 2000

Number 2000/3

LIVESTOCK AND PASTORAL CONDITIONS

Seasonal Conditions

Most areas in the southern half of the State received significant rainfall, which has further promoted pasture growth and has consolidated, yield prospects for the winter crops.

In the northern half of the State, conditions continue to deteriorate with only light scattered rainfall recorded. Pastoral conditions in the western section remain above average with a large bulk of residual feed from the excellent conditions last summer and autumn. The North West Slopes has only received minimal falls and conditions are reaching critical stages with reports of handfeeding of livestock and the grazing off of crops.

The comparative economic benefits of livestock versus crops have seen crops being grazed off earlier than would be normal.

Rainfall on the Northern Tablelands and the North Coast is well below-average and relief rainfall is urgently required. Stock owners should be implementing strategies to reduce the impact of the low feed availability by reducing numbers on handfeeding to provide early marketing of stock where appropriate.

River levels in all the west flowing rivers from the Macquarie south are well above average, with minor flood-level warnings issues for the Lachlan, Murrumbidgee and Murray at various times over the last month.

Bushfires

A number of bushfires have been reported in the north of the State with the most serious in the Kingstown area of Uralla Shire. Nearly 5,000 hectares of grazing land was burnt. The dry conditions in the north continue to cause concern, particularly where there is a bulk of dry residual vegetation.

Plague Locusts

Massive widespread hatchings are occurring in the areas west of a line from Broken Hill, Wilcannia, Ivanhoe, Hillston, Griffith, Narrandera and Deniliquin. Conditions are good to excellent in those areas and, unless control is carried out, there is a high risk of heavy plague populations migrating to the south and east later in the spring and in early summer.

Training workshops have been conducted for RLPB staff and NSW Agriculture officers in control strategies and contingency plans are in place for coordinating activities with the Australian Plague Locust Commission.

Control spraying has commenced in the Broken Hill and Wilcannia areas on nymph bands late in September with fenitrothion. There is sufficient product of the bio-insecticide Metarhizium (Green Guard®) to treat under permit, approximately 25,000 hectares in environmentally sensitive areas.

QUARTERLY HIGHLIGHTS

Remember the exotics – think the worst first Bovine brucellosis excluded

A cattle herd at Wagga Wagga was investigated following the identification of a single cow that was sero-positive for bovine brucellosis. The cow was one of eight tested under the Department's Targeted Surveillance Program for bovine abortions and infertility by a local practitioner. Unfortunately, the cow was culled for slaughter soon after testing, and was not available for further follow-up testing. However, testing of the balance of the 600-head herd has been completed with all animals testing negative. Two neighbours with small numbers of cattle are also being tested.

Australia has been free from brucellosis for more than 10 years so it is most likely that this cow was a false positive reactor, rather than being infected with brucellosis. Despite this, any reactors such as this are fully investigated to confirm their status.

FMD excluded

Pestiviraemia caused multifocal ulceration of the buccal cavity and dorsum of the tongue in a 6-month-old animal from Maitland. Material from this animal was submitted as an exotic disease exclusion and the ELISA and gel diffusion precipitation test (GDPT) for foot and mouth disease virus performed at the Australian Animal Health Laboratory (AAHL) were negative.

Pestiviraemia was also associated with illthrift, diarrhoea, and focal erosion/ulceration of the tunica mucosa in the proximal alimentary tract and death in cattle <2 years of age at Walcha, Narrabri, Braidwood and Albury. In the Walcha herd, there

was a mortality rate of 2.8% amongst 400 animals. Three of 20 clinically normal siblings yielded positive reactions in the pestivirus antigen capture ELISA (PACE).

Tuberculosis excluded

A suspect TB case was investigated in a Friesian cow from Muswellbrook. Histologically, the animal had severe bronchogenic and hepatic abscessation with a morphology suggestive of *Actinomyces pyogenes* infection.

On the look-out for Hendra virus

Hendra virus was eliminated as a cause of multifocal pulmonary haemorrhage and evidence of intravascular coagulopathy in a 2-year-old Thoroughbred from Camden. Histological sections of lung contained small numbers of multinucleate giant cells and yielded negative results in the indirect immunoperoxidase test for Hendra virus at the Australian Animal Health Laboratory Geelong.

Sulfonamide review

The NRA has completed their ad hoc review and advised that the only product which is to be cancelled following the conclusion of this review is Cliftons Coccee Solution (sulfadimidine).

Registration was cancelled on 29 August 2000, and retail sale will be permitted till 30 June 2001. Use will be permitted until 31 December 2001, after which use will be illegal.

Labels of many other sulfonamide products are being altered in line with the outcomes of the review — many uses will no longer appear on the labels of the remaining products, and farmers are not able to use products contrary to the label directions. Veterinary surgeons however can provide written directions for off-label use.

Diazinon review

The National Registration Authority (NRA) has released the public DRAFT review of Diazinon under the Existing Chemical Review Program (ECRP). The report identifies a number of use patterns that cannot

be supported by Australian data and a number of Maximum Residue Limits (MRLs) have been replaced by temporary "T" MRLs.

The NRA invites comment from interested persons and organisations to generate data to address these deficiencies in the current data.

The Summary Report is available from the Agricultural and Veterinary Chemicals section or on the NRA's internet website located at: <http://www.nra.gov.au/chemrev.html>.

DISEASE TRENDS AND PREDICTIONS

Newcastle disease update

No new cases of Newcastle disease have been confirmed in NSW since February 2000.

The Mangrove Mountain Control Area is still in place, with widespread vaccination in this area. Three farms in the Tamworth/Moonbi area have now been released from quarantine. However, six farms remain in quarantine in the Sydney basin, with all quarantined farms vaccinated. There have been no reports of clinical disease or virulent virus on any of these farms since February 2000.

There is now widespread vaccination of the majority of broilers (some farms are not vaccinating) in the Sydney basin. Vaccination of introduced pullets to the 80-odd layer farms is not widespread.

No virulent viruses have been isolated from the NSW survey at this point (and, since early embryo deaths were not a feature of the virus isolations, are not expected).

Contact: Rory Arthur, Orange on (02) 63913719

Akabane prevalent

Following on from the initial report last quarter, a number of properties mainly across the north-west of the state have now reported losses due to Akabane

infection. Affected calves have variable degrees of arthrogryposis, non-suppurative encephalitis and hydranencephaly. Some peri-natal deaths have also been experienced. This is the first time for some years the Akabane has been active in this area, so that few cows have any immunity to the virus.

Ovine brucellosis in south-west NSW

Ovine brucellosis (OB) was diagnosed (by complement fixation test [CFT]) in one or more rams on three of ten commercial sheep properties participating in a surveillance scheme in the far southwest, during the quarter. Since the commencement of the scheme in April, OB has been detected on ten of 72 participating properties. The prevalence of OB in the southwest is probably higher than these figures indicate, as not all-commercial producers have agreed to participate, and the method generally used (CFT for only those rams with palpable genital lesions) is of less-than-optimal sensitivity.

The source of some outbreaks can be readily traced to the purchase of rams bought without disease-free certification. However, outbreaks on properties that had previously eradicated the disease are thought to be due to infected rams breaching boundary fences.

In addition to ongoing surveillance, a questionnaire to assess producers' awareness of OB, and their preparedness to participate in a spectrum of containment strategies (ranging from control at current levels to eradication), is planned. The profitability of individual sheep enterprises is thought to be one factor affecting producer attitudes towards participation in OB control programs.

Contact: Aarn, Balranald on (03) 5020 1691

Internal Parasites

The very lush conditions over the autumn and winter have produced perfect conditions for the multiplication of worms in the northern areas of the Western Division. There have been a number of

properties that have suffered quite heavy losses, particularly from Haemonchosis.

Goats have also suffered severely from worms and it appears that there is a high level of resistance in the parasite population. This may well be a result of the importation of particular Boer goats from the Slopes and Tablelands where there are high levels of resistance.

DISEASE CONTROL AND ADVISORY PROGRAMS

Bovine Johne’s Disease Market Assurance Program

At the end of September there were 1202 herds which had been tested under the CattleMAP within NSW, consisting of 142,725 head of cattle. This is an increase of 39 herds since the last quarter. Of these, 441 herds (46,504 head) have had 2 screening tests and 66 herds (3,294 head) have had 3 tests. The percentage of herds tested with reactors remains steady at around 14% (223) with the percentage of reactors remaining at about 0.2%. To date 28 herds (2.3%) have been diagnosed as infected during MAP testing.

There are currently 1,092 herds with a MAP status in NSW (Table 1).

Table 1: Number of herds with statuses under the CattleMAP

MAP Herd Status	This Quarter	Last Quarter	At 30 June 1999
MN1/TN1	360	438	376
MN2/TN2	317	301	213
MN3	236	158	0
NA	179	118	61
TOTAL	1092	1015	650

Contact: Tim Jessep, Goulburn on (02) 4828 6614

Australian Sheep Johne’s Disease Market Assurance Program

There are currently 325 flocks in the SheepMAP representing about 1% of the State’s sheep flocks, 286 with a status of MN1 and 39 with a status of MN2. Of these, 50 MN1 flocks and 5 MN2 flocks lie within the Residual Zone and 236 MN1 flocks

and 34 MN2 flocks lie within the Control Zone for OJD.

Contact: Catherine Taragel, Orange on (02) 6391 3924

Australian Alpaca Johne’s Disease Market Assurance Program

There are now 72 herds in the Alpaca MAP in NSW, with a total of 2058 animals tested. There has been a move for herds in the scheme to progress to MN2 and there are now 942 animals in 34 herds at this status. There are 38 herds with 1116 animals at MN1. 21.5% of herds in the state are now in the AJDMAP. There are 680 producers with 9543 animals registered with the A.A.A. in NSW, this includes the southern portion of Queensland.

Contact: Bob Coverdale, Dubbo on (02) 68811275

Enzootic Bovine Leucosis

The NSW EBL Control and Eradication Program is in the final stage of eradicating the infection from dairy herds in the State. The current EBL status of herds in NSW as of 1 October 2000 is outlined in Table 2.

Table 2: EBL Status of dairy herds in New South Wales at 1 July, 2000

EBL Status	Number of herds (% of total dairy herds)	
Accredited & Certified Free	5	(0.3%)
Tested Negative	544	(33.6%)
Monitored Negative	995	(61.4%)
BMT Negative	22	(1.4%)
Provisionally Clear	25	(1.5%)

Provisionally Clear New	1	(0.1%)
Infected	18*	(1.1%)
Under Investigation	0	(0.0%)
Not Assessed	10	(0.6%)
TOTAL	1620	(100%)

* plus one infected dairy heifer rearing farms

On 1st, July 1999 the Program progressed from voluntary to compulsory at the dairy industry request and currently all EBL infected farms are quarantined. The industry has come a long and successful way in eradicating the infection, reducing the number of infected herds from 569 (29.5%) herds in July 1994 to 18 (1.0%) in September 2000.

As a consequence of deregulation, Safe Food NSW is no longer involved with the collection of BMT samples. At the recent EBL Steering Committee meeting and at the Dairy Industry Conference in September 2000 it was agreed that routine BMT sampling and related functions would be the responsibility of each processor.

Contact: Richard Zelski, Maitland on (02) 4930 2419

Cattle Tick Control Program

An assessment of saleyard and abattoir surveillance carried out between January and May 2000 determined the level of monitoring for Tweed Lismore RLPB at 45 % of cattle and 60 % of herds; Casino Board 36 % of cattle and 67 % of herds and Grafton Board 14 % of cattle and 58 % of herds. Denominators were based on RLPB figures.

The breakdown of detection methods, based on the index case plus adjoining holding and tracing from the index case, was as follows:

Saleyard and abattoir surveillance:	42 %
Inspection of quarantined holdings:	13 %
Annual Inspection Programs:	27 %
Owner reports:	9 %
Off-duty staff (Grafton):	9 %

Contact: Peter McGregor, Wollongbar on (02) 6626 1334

DISEASE SURVEILLANCE

National Transmissible Spongiform Encephalopathy surveillance Program (NTSESP)

By the end of the quarter, 136 cattle and 79 sheep brains had been examined under the national program, with TSE excluded in all cases. NSW has already exceeded our cattle target of 100 brains for a calendar year however is still behind in sheep numbers required (153).

In an attempt to bolster sheep brain numbers by the end of the year a mail-out to all submitters and one to all practices located in sheep raising areas was carried out in early October. Additional submissions of brains from eligible cases in sheep are required urgently. The NTSESP provides for payment to the producer and the submitting veterinarian for all eligible brains submitted, as well as for laboratory testing to exclude TSEs and to attempt to establish a diagnosis.

Contact: Steve Dunn, Gunnedah on (02) 6742 9293

Ovine Johne's Disease Surveillance

A total of 565 infected flocks have now been identified in NSW since 1980, with 478 (1.5% of the State's flocks) still having an IN status. Of the 478 current known infected flocks, 323 (68%) are in the Residual Zone. About 8% (323/3988) of flocks in the Residual Zone are known to be infected, compared to <0.6% (155/27887) in the Control Zone. 37 new infected flocks were reported during the July to September period.

Table 3 summarises the current status situation in NSW.

Table 3: Summary of current status by zone

		Current Status				
Zone	Flocks	IN	SU	NA	US	Total
	*					

Control	27887	155	301	886	564	1906
Residual	3988	323	344	225	1122	2014
Total	31,875	478	645	1111	1686	3920

* Total flock numbers in Control and Residual zones are approximate only

Abattoir surveillance for OJD has now been running in NSW since the end of November 1999. For the July-September period 2,767 lines totalling about 900,000 sheep were examined. Of the 2,767 lines examined, 294 lines have had samples sent to the laboratory for examination and 123 of these lines have returned a positive result. By the end of September 2000 more than 2.6 million sheep had been screened in over 8,000 lines, with 540 positive lines detected. 32% (311/966) of lines from the Residual zone were positive compared to only 2.7% (152/5635) of lines from the control zone. Almost all of the positive lines have come from areas where the

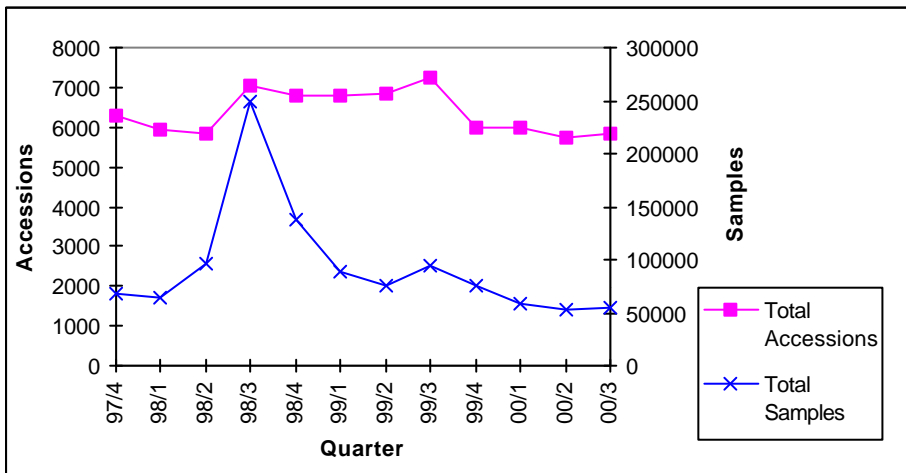
disease is already known to occur. Eight positive lines have been detected in sheep from interstate, all from Victoria.

Contact: Evan Sergeant, Orange on (02) 6391 3687

Laboratory submissions

The graph below shows the throughput of laboratory submissions and the number of samples processed.

Contact: Evan Sergeant, Orange on (02) 6391 3687



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 New South Wales. If you would like more specific information about diseases occurring in your part of the State, contact your local Rural Lands Protection Board district veterinarian; Departmental senior field veterinary officer; or Regional Veterinary Laboratory.

For statewide information, contact NSW Agriculture's Quality Assurance Program in Orange on (02) 6391 3237 or fax (02) 6361 9976.

For more information on national disease status check out the National Animal Health Information System (NAHIS) via the the Internet at:

<http://www.brs.gov.au/aphb/aha>

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Copies of NSW Animal Health Surveillance reports are available on the Internet at

<http://www.agric.nsw.gov.au/QA/Newsletter>



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