



New South Wales



ANIMAL HEALTH SURVEILLANCE

January - March 1998

Number 98/1

STAFF

John Sullivan, a 1997 Brisbane graduate, started as DV Braidwood at the beginning of the year. John, by all accounts, is off to a good start in a position which was vacant for over two years.

Michelle Dries commenced as DV Nyngan. Michelle is a 1996 Sydney graduate with an impressive record of achievement and an ambitious future, and we hope we can live up to her expectations!

Ian Masters is leaving the Hay RLPB and will be working as DV Narrandera while **Gabrielle Morrice** is on a year's maternity leave. We wish both well with their new challenges. **Linden Moffatt** (formerly locum at Warialda Board) is covering Peter Greentree's leave from Tenterfield.

LIVESTOCK AND PASTORAL CONDITIONS

Hot, dry conditions across the State and strong winds in some areas have seen a further deterioration in the pastoral situation.

Areas in the north have hayed off and there is still a bulk of dry feed on the Northern Slopes and Tablelands. Summer crop yields have been variable, depending on management of soil moisture, but generally have been above average. Conditions on the North Coast are generally

satisfactory but deteriorate rapidly south of the Mid-North Coast.

Southern areas have further deteriorated with water supplies critical, particularly in the Tablelands and Slopes. Paddock feed has all but disappeared and the autumn break is critical.

Stock condition is remarkably strong, as a result of reduced stock numbers, available paddock feed maintaining quality with the lack of rainfall and many producers opting to early wean and sell off of young stock.

The sell off of young stock, including potential breeders, will have delayed effects on flock and herd reproduction rates when conditions return to normal.

Early winter forage crops, sown on light storm rains in February, have generally failed and general land preparations for winter cereals have been delayed.

A feature right across the northern areas is the extreme variability in conditions as a result of heavy, isolated storms.

Widespread rains early in April have provided some relief and improved prospects for winter crops

Contact: John Bowler, Orange on (02) 6391 3680.

QUARTERLY HIGHLIGHTS

Avian Influenza Outbreak, Tamworth, 1997.

Following the closure of the emergency operations centres in Tamworth and Orange in January, several officers have remained significantly involved in “mopping up” activities which include:

- ongoing surveillance of the three former infected premises in Tamworth, to prove freedom in accordance with OIE requirements;
- maintenance of movement restrictions and permit systems from those premises;
- completion of surveillance over several broiler flocks in Sydney (hatched from eggs laid by infected hens just outside the likely incubation period);
- continued negotiation with several parties over compensation, damages and operational costs;
- validation and payment of the above and numerous other accounts;
- sorting and relocating innumerable files to ensure they can be retrieved for historic and legal purposes;
- preparation of hundreds of letters of thanks to staff and cooperators;
- organisation of debriefings.

Several internal debriefings have been conducted: in Tamworth (for selected Local Disease Control Centre staff); in Orange (for State Disease Control Centre staff, those involved in legal aspects of the response, and into management); and at EMAI (for laboratory staff, and for those involved in hatchery operations and surveillance of broiler farms in the Sydney area). Constructive feedback covered such diverse issues as staff rostering and change-overs; on-site management of resources; the timeliness of laboratory submissions and reporting arrangements; and more efficient ways of euthanasing large numbers of chickens.

Limitations to our legislation will be addressed through amendments and the current legislation review process. Suggested improvements to AUSVETPLAN will be provided through DPIE to the Australian Animal Health Council.

In addition, local poultry farmers and support industries participated in a debriefing in Tamworth and we also contributed to the Tamworth/Peel Local Emergency Management Committee debriefing. Good communications and cooperation

between government agencies and with industry were highlighted.

About 40 national poultry industry and government representatives participated in a debriefing at EMAI which focussed on significant policy issues, disease prevention, and future management and funding options. The industry generally is very appreciative of the decisive and effective action taken by the Department and for the excellent media management which limited consumer and trade impacts. The industry appears to accept that they must take increasing responsibility for exotic disease preparedness, response and funding in future.

Contact: Ian Bell, Orange on (02) 6391 3691

DISEASE TRENDS AND PREDICTIONS

Anthrax

There have now been nine anthrax incidents diagnosed during the quarter.

A focus of four has occurred in the Central West area, on adjoining properties and adjoining paddocks, two in Molong RLPB and two in Dubbo RLPB. The first property also had cattle deaths last year for which a diagnosis was never confirmed and which may have been due to anthrax. This may have contributed to a build-up of soil contamination leading to this year's cases. At least two of the four properties had a history of anthrax in the early 1940s.

A second focus of infection was in Narrandera RLPB, where two properties have had cases. The second case does not adjoin the first, but is within a few hundred metres of the boundary. Again, the first property had a history of anthrax 40 years ago.

Interestingly, all these cases occurred in areas that have a history of anthrax many years ago but have not had any recognised cases in recent years. The remaining cases involved pigs and sheep on two adjoining properties in Hay RLPB, and cattle on a property in the Murray RLPB.

This brings the total number of incidents for the 1997—98 season to 13; well within normal

expectations, considering the hot, dry conditions experienced this summer.

Laboratory examination excluded Anthrax as the cause of death in 10 other disease investigations during the quarter and in 13 investigations for the 1997-98 Anthrax season

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

DISEASE CONTROL AND ADVISORY PROGRAMS

Bovine Johne's Disease Market Assurance Program

There are now 452 herds enrolled in the cattle JD MAP in NSW, with 323 at TN1 status, 17 MN1 and 55 TN2. The remaining 57 herds are still awaiting confirmation of their status. To date, 54,051 cattle have been tested, with 109 reactors (0.2%) requiring follow-up in 76 herds. Sixty eight reactor herds have been resolved, with three infected herds now identified by MAP testing. The ratio of beef to dairy herds in the MAP remains steady at about 70:30, and about 66% of herds are studs.

A list of assessed herds is available by Infifax on 1902 940 579.

Status streams

There is now only one status stream in the MAP. All herds entering the scheme from now on will be classified as MN1 if not infected. The whole herd test will consist of all cattle > 2 years of age if the number is < 210 up to a maximum of 300 for herds > 210. The intervals between tests will be 22-26 months. Herds already in the scheme as TN1 can progress to MN2 at an interval of 10-26 months. Herds already in the scheme as MN1 will be testing the appropriate number of cattle >2 years (not 4) at the second test.

Protected Areas

New requirements for movement of breeders to Queensland will commence on May 1. This has accelerated the thoughts of producers in areas of NSW without JD to apply for Protected status to minimise the disruption of trade with Queensland. These areas will have to demonstrate the virtual absence of JD and also demonstrate that they can monitor the movements of cattle into their

proposed protected area to ensure that they can meet the appropriate disease requirements. These will be similar to requirements for the Queensland situation. The effect on the MAP scheme will depend on the extent of the area in NSW gazetted as "Protected". The eventual aim of movement controls will be that breeders moving into a Protected Area from a lower status area will have to come from MAP herds.

Contact Tim Jessep, Goulburn on (02) 4823 0744.

New South Wales Footrot Strategic Plan

This quarter was a busy one for RVL Orange processing 116 submissions for footrot culture with 86 (75%) coming from the New England, the only area of the state receiving good summer rain. A total of 14 districts made submissions.

Hot to very hot and dry to exceptionally dry conditions prevailed over the rest of NSW curtailing any thought of footrot surveys or auditing in the southern tablelands. It is hoped to have a reasonable audit of the Northern New England district during April if seasonal conditions allow.

Footrot quarantines are at 180 flocks (550,894 sheep) for the March quarter (basically no change from last quarter) but with the declining flock numbers (denominator) the percentage of the state flock to which this relates is slowly climbing (now at 0.55%). The number of sheep in quarantine is climbing also. Compared to the second quarter in 1996 where a similar number of flocks were in quarantine there has been a 55% increase in the number of sheep quarantined. With a number of districts still at Residual status not all have full quarantine requirements so this figure still underestimates the big picture with footrot control. Certainly not a time to become complacent. The NSW Footrot Steering Committee met in March (meeting number 21) in Orange approving applications for Forbes (whole Protected area), Murray (most Control Area) and Braidwood (Division A to Control area). The committee examined a draft of the final AWRAP report and approved of a field protocol to carry out footrot audits for areas at Protected area status.

Contact Rob Walker, Wagga Wagga (02) 6923 0463.

Cattle Tick Control Program

Fifty-three properties have been found infected up to 31 March 1998. Four of these were properties found infected in 1997 where mustering problems had permitted infestations to persist.

Fourteen are properties which adjoined infected properties in 1997.

Thirty-one are within the Cattle Tick Protected Area. The remaining 22 are within the former Tick Quarantine Area or former Cattle Tick Protected Area (1996-97). Chemical resistance testing and DNA testing is to be examined in detail however it is already clear that some of the infestations detected in 1998 relate directly to 1997 infestations and have been spread through livestock movements not advised to CTP staff.

Thirty-three of the infested properties can be readily grouped into 10 separate foci of infestation.

Tick Fever in NSW

A single case was reported from a property near Urbenville. Babesia bovis was diagnosed at post mortem. No further cases were observed, nor have cattle tick been detected on the property.

Serological examination of the herd provided equivocal evidence of infection with some sero-positive animals being sero-negative within two to three weeks.

As a precaution, at risk animals were treated with Imizol (imidocarb).

A cattle tick eradication program (by dipping in amitraz) is being carried out on the property.

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

Endosulfan Survey

Table 1 shows results from the survey of endosulfan residues in cattle from NSW properties. All cattle were from properties which adjoined cotton growing properites, or grew cotton on the same property. The survey was conducted during and following the main endosulfan use period from late November to March.

Table 1:

	Neg	Trace	0.02-0.09	0.10-0.20	>MRL	Total
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	ppm		ppm		(0.2)	
Samples	223	111	92	10	3	439
Properties*	124	71	79	9	2	285

* NB: only the highest residue detected for each property is included in the "property" data)

There were 12 Rural Lands Protection Boards districts involved in the survey, covering all cotton growing areas of NSW

Contact: Graeme Williamson, Wollongbar (02) 6626 1370.

National Organochlorine Residue Management (NORM) Program

There were 4 residue detections during the current quarter, 2 of dieldrin levels above the Maximum Residue Limit (MRL) and 1 each of Dieldrin and DDT between half-MRL and MRL. During the quarter the OC testing list for NSW was reduced from 270 tags to 243.

Contact: Graeme Williamson, Wollongbar (02) 6626 1370.

Enzootic Bovine Leucosis

The 16th round of bulk milk testing (BMT) for EBL was completed in March, with the following results:

negative BMT	-	1693 dairies (94,3%)
positive BMT	-	84 dairies (4,7%)
not tested	-	19 dairies (1,0%)
includes seasonal producers, off supply, etc.		
TOTAL	-	1796 dairies (100%)

At the beginning of the EBL Eradication Program in 1992, over 25% of tested dairy herds produced positive BMT results. This indicates a considerable achievement in eradicating the infection from the States dairy herds.

There are still 209 dairy herds in NSW classified as INFECTED. The March 98 BMT test indicates that over 50% of these herds may have removed all known EBL reactors for slaughter:

Estimated Prevelance	Number of Herds
less than 2%	123 dairies (58,9%)
less than 5%	41 dairies (19,6%)
between 5% and 15%	26 dairies (12,4%)
more than 15%	16 dairies (7,7%)
not tested	3 dairies (1,4%)

TOTAL (status = INFECTED)	209 dairies (100%)
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In the March 98 BMT test round, 6 dairy herds produced an unexpected positive BMT result. The herds are under investigation. The preliminary investigation indicates that vat milk sampling errors (2X) or unintentional introduction of EBL infected animal(s) may have been responsible for the positive results.

Over 95% farmers supplying milk to "Dairy Farmers" (ACF), have returned completed authorisation forms approving release of their official EBL status from NSW Agriculture to the Co-Operative. This is in preparation for applying penalty prices on owners of INFECTED dairy herds which do not cooperate with Veterinary recommendations.

Table 2 shows the current EBL status of herds at the end of March 1998.

Table 2: EBL status, 31 December 1997

Status	No	(%)
Accredited Free	4.0	3.2
BMT Negative	99.0	15.2
Certified Free	1.0	0.8
Infected	209.0	15.2
Monitored Negative	1065.0	21.6
Not assessed	24.0	10.4
PCNEW	2.0	1.6
Provisionally clear	88.0	14.4
Tested negative	304.0	17.6
TOTAL	1796.0	100.0

Contact Richard Zelski, Maitland (02) 4930 2419.

DISEASE SURVEILLANCE

Ovine Johne's Disease Surveillance

During the quarter, 14 new infected properties were identified, bringing the total number of detections to 243 properties in NSW since 1980. Of these 243 flocks, 214 are still classified as infected. A further 15 properties have been destocked, and 14 have not reported a case for more than 5 years.

There are now 218 suspect properties in NSW, which includes the 14 properties on which OJD

was diagnosed before 1992. A further 17 properties are classified as 'under surveillance'.

National surveillance program

At the ARMCANZ meeting held in Hobart in February, there was agreement to proceed with a National Ovine Johne's Disease Program. A detailed Business Plan for long-term strategies will also be developed over the next few months.

This will involve NSW Agriculture putting in place an enhanced surveillance program. This program will initially involve both blood testing and faecal culture on suspect properties and staff will be put on for this extra workload.

In the short-term, it is anticipated that inspectorial staff will be reallocated to allow for the tracing from infected properties to be completed and for action to be taken on those properties where owner agreements have not been signed. The intent is that additional staff will be put on so that district veterinarians will not end up with an increase in workload.

Contact: Laurie Denholm, Orange (02) 6391 3863.

Australian Sheep Johne's Disease Market Assurance Program

Uptake of the Sheep MAP has been encouraging, with a total of about 11,300 sheep in about 60 flocks having undergone testing for the Sheep MAP. To date only 3 positive reactors have been detected in 2 flocks. All reactors so far have been resolved as negative by follow-up investigation.

At the end of March 1998, 38 flocks have achieved MN1 status.

Contact: Steve Ottaway, Orange (02) 6391 3834

Sheep Lice

Yennora Sheep Lice Survey

The 1997-98 survey has been completed with 696 clips having been examined at Yennora.

On the results of the examination of lots in the store, 11.4 % of clips were lousy, a considerably improvement over previous surveys.

On information entered into the data base from questionnaires that have been returned (329), the percentage of lice infested properties in 1996 was

17.1% and 14.5% in 1997. The percentage of owners who did not know if their sheep were lousy or not was 12.5% and 12.2% respectively.

Contact: John Plant, EMAI (02) 4640 6403

Avian Tuberculosis

Avian tuberculosis caused the deaths of four 10-month-old pullets from Yass. Pathologically, there was multifocal granulomatous hepatitis and splenitis, and *Mycobacterium avium* complex was recovered from the affected organs.

Transmissible spongiform encephalopathy (TSE) surveillance

During the quarter, brain tissue from 3 cattle and 3 sheep was examined histologically for evidence of TSEs with negative results.

During February, the ARMCANZ Ministers agreed to the implementation of the National TSE Surveillance Program set out in the business plan developed by AAHC. NSW will be implementing this program during the coming quarter.

Veterinarians will be asked to submit brain and other tissues from any TSE-like cases in sheep or cattle for TSE exclusion and differential diagnosis.

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

Arbovirus Monitoring

During this quarter sampling was conducted at all coastal NAMP sites in NSW as scheduled. All inland sites (except Tamworth where there has been major disruption due to the Avian Influenza outbreak) have also been sampled according to schedule. Results of sampling for viruses are attached and the vector monitoring will follow.

Akabane Virus

There has been extensive Akabane transmission with seroconversions commencing in early January on the Far North Coast and spreading south through all sites as far as Camden and west throughout the Hunter Valley. The virus appears to have spread to the limits of the endemic area with perhaps limited "spill-over" at the margins (including one site in the vector "Buffer zone"). The drought conditions have probably limited the potential for this year's early transmission to

develop into a major epidemic. In marginal areas, where there has been very limited transmission in

recent years, there are early indications of disease due to Akabane, with several cases of new born calves with encephalitis (infection in the last 6 weeks of gestation).

Bluetongue Virus

To date there has been sporadic and very limited seroconversions in 2 herds on the far North Coast. Type-specific serology and virus isolation has yet to be completed.

Bovine Ephemeral Fever Virus

There have been no Ephemeral Fever seroconversions detected anywhere in the state. There have been occasional cases of EF-like disease reported in the north and north-west of the state, but none have been confirmed as BEFV infection, despite collection of good paired sera.

Contact: Peter Kirkland, Menangle on (02) 4640 6331

Bat viruses

During the quarter, 26 fruit bats and 2 micro-bats were examined for evidence of lyssavirus infection, with negative results. A total of 150 fruit bats have now been examined for lyssavirus, with 9 found to be infected, and 34 micro-bats examined have all been negative.

Six horses were examined for evidence of bat paramyxovirus infection during the quarter, all with negative results. A total of 91 fruit bats, 12 micro-bats and 11 horses have now been examined for evidence of paramyxovirus infection, with 1 fruit bat serologically positive, and one virologically positive.

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

Toxoplasmosis Survey

Results from a national pig industry survey of the prevalence of *Toxoplasma gondii* in feral pigs, commercial indoor and outdoor sows and finisher pigs, has been released by the Pig Research and Development Corporation.

The national serological prevalence of toxoplasmosis was estimated as 1.3% for finisher pigs, 11.5% for indoor sows, 6.7% for outside sows, and 9.3% for feral pigs. NSW Figures were

comparable to other States. These results compare favourably with those recorded in our major trading partners. NSW Agriculture officers and the Regional Veterinary Laboratories participated in collecting representative samples for this survey. *Contact: Regina Fogarty on (02) 6391 3690.*

Bee Diseases

Table 3 shows the results of American foul brood (AFB) testing for the current quarter, and the financial year since July 1997.

Table 3: AFB testing summary for New South Wales

	January-March, 1998	Since July, 1997
Positive	69	347
Negative	70	348
Total	139	695

Of the 347 positive reports since July, 237 were new cases, while the remaining 110 were repeat tests on previously confirmed cases. 78 of the 237 'new cases' had also had positive reports during the 1996-97 financial year.

Two reports of chalkbrood were received during the quarter.

Contact Keith Oliver, Orange on (02) 6391 3689.

Exotic Disease Investigations

Following the recent avian influenza (AI) outbreak at Tamworth, there has been an increased awareness of exotic disease in poultry, resulting in a number of cases being submitted for exclusion testing for AI.

Investigations were also carried out on high mortalities in a breeding complex at Tamworth to exclude AI and on a suspect Newcastle Disease outbreak in commercial layers in Sydney.

Laboratory submissions

Table 4 shows the throughput of submissions through the laboratory system since 1 January 1998, and figure 1 shows throughput since January 1996. Both accession and sample numbers declined during the current quarter.

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

Figure 1: Laboratory throughput by quarter.

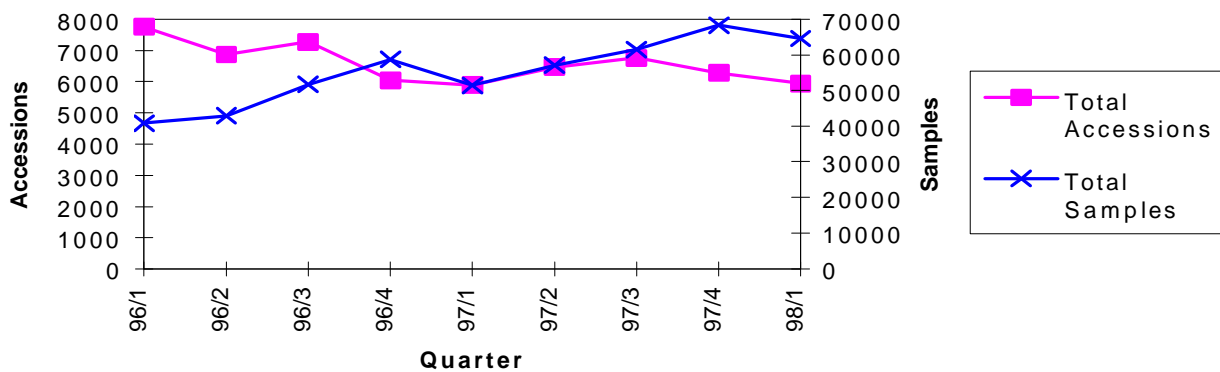


Table 4: Number of accessions to NSW Agriculture laboratories by species, January - March 1998

	SHP	CTL	PIG	GTS	AVN	HRS	FSH	BEE	D/C	O.SP	Total
Menangle	937	1408	80	70	143	182	1	88	98	506	3513
Orange	804	195	18	17	32	11	0	14	12	81	1184
Wollongbar	78	865	36	32	26	15	20	69	3	99	1243
TOTAL	1819	2468	134	119	201	208	21	171	113	686	5940

FROM THE AUSTRALIAN ANIMAL HEALTH COUNCIL

AAHC is this month seeking ARMCANZ* and industry endorsement for a national strategic plan

for animal health services through to the year 2003. As well, AAHC will ask for agreement to implement three key priority issues contained in the plan.

The three are:

- how roles and funding responsibilities are allocated between governments and industry for national animal health programs;
- rationalising and integrating public and private sector laboratory services; and
- integrating and accrediting private sector vets, and other providers of services, into delivering national animal health.

Under the first priority, sets of principles would be pre-agreed to avoid “protracted and subjective debates” when a particular issue arises. Under the second, national minimum laboratory service delivery standards would be established, which could be met by public or private sector labs.

The third priority would act in concert with the second and incorporate private vets and vet laboratories as well as university vet schools and research and development organisations into a national animal health service system. An important component is developing an Accreditation Program for Australian Veterinarians (AVAP): AAHC has been working closely with Australia’s Veterinary Committee to

finalise such a program. An interim accreditation program has been operating since July 1996.

AAHC plans to appoint consultants shortly to work with the Sub Committee (*of Veterinary Committee*) on Animal Health Laboratory Standards (SCAHLs) on the laboratory service system in this country.

In an allied development with long-term impact, AAHC has foreshadowed providing ARMCANZ in August 1998 with further priorities for action, including:

- developing core performance standards for animal health services;
- developing incentive structures to support reporting, management and funding of emergency animal disease situations; and
- an enhanced national surveillance system.

*Contact: Australian Animal Health Council,
Canberra, on 02 6239 5727*

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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