NEW SOUTH WALES

ANIMAL HEALTH SURVEILLANCE

Information contributed by staff of the Rural Lands Protection Boards and the NSW Department of Primary Industries

April - June 2006 • Number 2006/2

QUARTERLY HIGHLIGHTS

Botulism in cattle

A North Coast dairy herd suffered losses of 98 out of 115 head following an outbreak of botulism in late May – early June. The herd had been fed corn silage from a recently opened pit. The silage had been mixed with some home-grown lucerne silage and some purchased whole cottonseed and then fed out from a mixer wagon.

The diagnosis was based on clinical signs before death (recumbency, paresis, dyspnoea) in the absence of post-mortem lesions, and the history of exposure to suspect feed. However, laboratory tests on samples from feed and dead animals were negative for *Clostridium botulinum* toxins C and D.

All 98 cows were buried on-farm in deep clay-lined pits. Milk collection from the remaining cows was suspended by the processor until after all deaths had ceased. All cattle remaining on the property have been vaccinated, as will any introductions before entry.

DPI's Dairy Livestock Officer sought counselling support for the herd owners.

A beef herd near Wentworth had several cattle die and some showing signs of weakness and recumbency, with difficulty chewing and swallowing. Samples of intestinal contents from affected animals failed to find *C. botulinum* toxin, but serology on a representative cross-sectional sample of 20 of the herd showed three positive for Type D toxin and five positive for Type C *C. botulinum* toxin. This indicated that the cattle had commonly been exposed to botulinum toxin in the past, and it was reasonable to suspect they had again been exposed on this occasion.

Toxin detection is rarely successful because of the minute amounts involved and the short time the toxin is in the blood; in the case of feeds, the toxin may be localised to a small section of the feed and may have already been consumed.

Treatment of botulism cases is unrewarding, and symptomatic only. Most affected animals die.

For further information contact Paul Freeman, Regional Animal Health Leader (Wollongbar), NSW DPI, on (02) 6626 1214, or Greg Curran, Senior Regional Animal Health Manager (Western Division), NSW DPI on (08) 8088 9336.

'Acorn calf' (chondrodysplasia of calves) surveillance project

DV Hume commenced a field surveillance project in the Hume RLPB during the quarter. This involved collection of soil, pasture and water samples from three properties where acorn calves had been born in 2003 and 2004 (See NSW Surveillance Issue 2004/3). Blood samples were collected monthly for 3 months from 30 randomly selected pregnant cattle. All samples have been processed and stored

Right: Cow with botulism.
Photo by Ian Poe

In this issue!

Rural Lands Protection Boards

NSW DEPARTMENT OF PRIMARY INDUSTRIES

for retrospective mineral analysis in the event that acorn calves are born on the properties in spring. Similar sampling was done by the Victorian DPI on two properties in Victoria.

The objective of this small field project is to support or disprove the theory that an excess of one or more trace minerals consumed by pregnant cattle during autumn induces a manganese deficiency, resulting in chondrodysplasia of the developing foetus.

For further information contact Steve Whittaker, DV Hume RLPB on (02) 6040 4210.

Malignant catarrhal fever

During the quarter malignant catarrhal fever (MCF) was diagnosed on neighbouring properties in the Gundagai RLPB district. One property had two stock deaths, and then a third death was confirmed as MCF by PCR virus detection. The cattle on this property were associated with lambs 6 to 9 months old. The owner had reported sudden deaths like this on an annual basis, and MCF had been diagnosed previously.

On the second property, about 3 weeks later, three sick animals were reported. One of these was confirmed MCF positive and later died. Another 3 weeks later another animal became ill and tested positive for MCF. The cattle on this property were separated by a road from the cattle on property number one. Sheep are also present on this property, but stock contact between the groups has not been identified. Airborne spread of the virus has been considered.

Clinically, the sick cattle presented mainly with respiratory signs and condition loss. Signs included excess lacrimation, purulent nasal discharge, increased lung sounds, depression and scouring.

MCF was also diagnosed in a Hereford steer in the Hunter RLPB district. The animal showed sudden lameness with joint swelling in all four limbs, inappetence, recumbency and death. Pleurisy, swollen liver, mottled heart muscle and polyarthritis were observed at post mortem. Infections due to chlamydia, erysipelas, mycoplasma, salmonella and *Haemophilus somnus* were excluded. The lesions on histopathology were suggestive of bovine MCF, which was confirmed by ovine herpesvirus-2 antigen detection in the spleen.

For further information contact Helen Crabb, DV Gundagai RLPB on (02) 6944 1588

Urolithiasis in feedlot lambs

In Narrandera RLPB urolithiasis was diagnosed in three flocks of feedlot lambs.

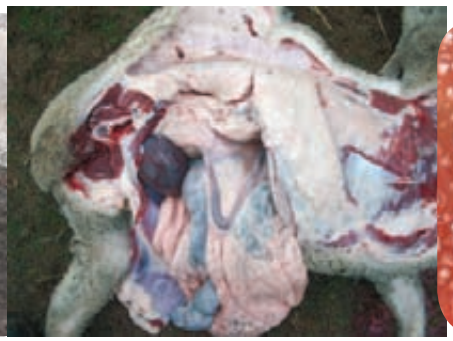
One case involved the death of two wether lambs out of 28 in a small feedlot trial. Severe hydronephrosis was observed on post-mortem examination. Further losses were prevented by increasing the amount of salt in the diet. Another case involved four out of 200 lambs, and the third case involved two out of 200 lambs. Both cases were resolved by the addition of salt to the ration.

In Wagga RLPB urolithiasis caused the death of 12 lambs (ewes and wethers) out of 600 in a feedlot using a commercially formulated pellet. Within days the problem had caused havoc: the owner reported further deaths and dozens of sheep ill. Feed analysis revealed a correct calcium to phosphorus ratio. It is thought that a slightly high cation to anion balance in the feed, and/or poor water quality, contributed to the problem. The owner sold the entire mob at a considerable financial loss.

Urolithiasis in feedlot lambs was also diagnosed in Forbes RLPB. Three lambs died and another three out of 400 presented with 'water belly'. Bore water was used as drinking water for the lambs. This was analysed and found to be of 'very good quality'. The property had had feedlot fed lambs over the last few years with no problems. The only thing that had changed was that they had stopped incorporating lime into the mix about

Calf with chondrodysplasia. Photo by Luzia Rast.

Lamb with 'water belly'. Photo by Shaun Slattery.



Haemorrhagic bladder clearly seen on post mortem. Photo by Shaun Slattery.

Stones in urin

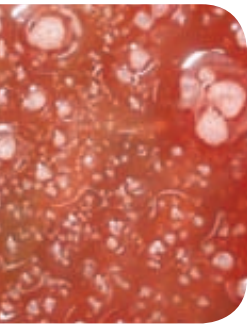
3 weeks before the onset of the problem. Laboratory analysis showed struvite crystals in an alkaline urine. A dietary imbalance of Ca: P was suspected to be the cause. As the lambs were well finished, the producer decided to sell them straight away. Incorporation of lime and salt into the diet (1.5% lime and 1.5% salt) was recommended for prevention in the future.

In the Mudgee–Merriwa RLPB 25 out of 600 lambs being lot-fed pellets and lucerne hay suffered urolithiasis. Stone analysis revealed calcium phosphate with a trace of magnesium. Further losses due to rectal prolapse secondary to straining were reported. *Ad lib* salt provided in troughs helped prevent further cases.

Cases of urolithiasis were also reported in feedlot lambs in the Narrabri RLPB. The usual rate of urolithiasis in the 1000-head feedlot was one lamb per week, but at the start of July, coinciding with a cold change, the rate increased rapidly a to point where within 2 weeks 25 had died and several more had 'water belly'. A similar event had occurred during the previous winter. Crystals submitted to the Wollongbar Regional Veterinary Laboratory were confirmed to be phosphates.

This feedlot was using cottonseed meal (CSM) as the protein source in the ration. CSM contains very high amounts of phosphorus—over three times that of cereal grains. In this situation the standard recommendation of 1.5% calcium was insufficient to balance the high phosphate level to the recommended 2:1 calcium to phosphate ratio. A change from lucerne hay to wheaten hay further decreased the calcium to phosphorus ratio.

Once the outbreak became obvious, the owner increased the lime supplementation to 2.4% and salt to 2.3%. In addition he added molasses to the water troughs to increase consumption. This latter step dramatically increased water intake, producing a dramatic drop in the rate of new cases. The previous year affected lambs were put onto a lush oat crop, and this achieved a similar dramatic reduction in new cases.



ne. Photo by Shaun Slattery.

The owner of the feedlot recognised water consumption as a critical issue and decided to monitor daily water consumption.

From the above cases it can be seen that:

- consideration should be given to the protein and roughage source when deciding how much lime to add
- the recommendation of 1.5% salt is not sufficient in cold weather to keep feedlot lambs drinking enough to prevent urolithiasis
- measures to increase water consumption are successful when faced with an outbreak.
- water quality (including pH) should be considered.

Other contributing factors that should be considered are:

- Roughage is important for saliva flow and mineral metabolic balances in ruminants. Inadequate dietary roughage may be a contributing factor to urolithiasis in feedlots.
- Sorghum-based diets may be more likely to cause problems.

It was not known if the pellet suppliers had based their ration on sorghum in the cases detailed above.

For further information contact Shaun Slattery, District Veterinarian Narrabri RLPB on (02) 6792 2533.

Intestinal accidents in feedlot lambs

Four lambs in a mob of 350 six-month-old crossbred lambs in an on-property feedlot died suddenly on consecutive days. The final lamb that died was autopsied and the gross pathology initially appeared to be consistent with red gut. However, a more thorough investigation suggested that an alternative intestinal accident was the cause.

The lambs had been on feed for 4 weeks with no problems. The lambs were fed daily on a ration of 75% barley and wheat, 8% mung beans, and 15% barley hay, with the balance being about 2% minerals. Most of the barley hay had been fed by placing a 480-kg rectangular bale in the yards every fourth day, and only 3% of the barley hay was present in the Mixall™ mixed-trough ration. The lambs consumed the entire trough ration within a few hours, with the owner commenting how they ran to the trough and fed quickly.

This feeding regime allowed selection within the ration to avoid roughage and maximise mung bean (high protein) consumption. In addition, the daily feeding was producing gorging.

Autopsy revealed a haemorrhagic appearance to the wall of the rumen, abomasum, duodenum, and remainder of the small intestine (with the exception of the terminal ileum).

Bacterial enteritis and anthrax were excluded. The histological changes were supportive of a gastrointestinal accident.

This case is not consistent with traditional red gut, which involves just the portion of the intestine supplied by the cranial mesenteric artery and vein. The abomasum and duodenum are supplied by the gastric and gastroepiploic arteries (branches of the celiac artery) and drained by the gastroduodenal veins. For this case to be subsequent to a torsion event, there must have been occlusion of both the gastric and gastroepiploic (or celiac) arteries, as well as the cranial mesenteric, as the haemorrhagic areas in the gastrointestinal tract extended from the abomasum to the terminal ileum.

Intestinal accidents in other species where this situation occurs include:

- haemorrhagic bowel syndrome or intestinal volvulus in pigs
- gastric-dilation volvulus (GDV) of dogs
- abomasal torsion in calves secondary to right- or left-displaced abomasum (RDA or LDA). The dietary factors linked with LDAs and RDAs include low roughage, high concentrate diet and indigestion.

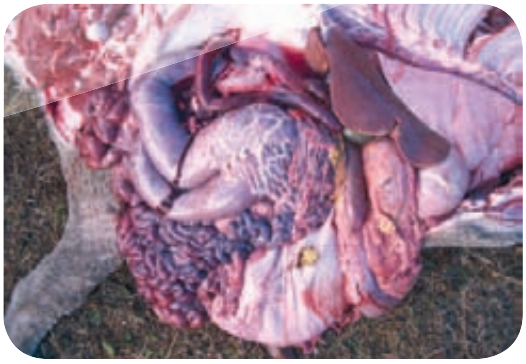
Management steps to reduce gorging at the daily feed were recommended and introduced, and no further losses were reported.

Although the absence of further cases prevented the exploration of the above possibilities, all were linked to dietary factors that were present as a result of the choice of diet formulation and feeding management. These include use of mung beans, separate feeding of roughage, and once-a-day feeding that allowed rapid consumption of the daily ration. As such, these factors should be considered when

investigating sudden deaths presenting as intestinal accidents in feedlot lambs.

For further information contact Shaun Slattery, District Veterinarian Narrabri RLPB, on (02) 6792 2533.

Intestinal tract of lamb affected by intestinal accident induced by diet. Photo by Shaun Slattery.



Bovine spastic paresis

The District Veterinarian at Narrandera investigated a case of congenital spastic paralysis of the hindquarters in two calves (the second- and third-born) out of a herd of 20 joined Angus cows. The cows were purchased in calf, so their full feeding history was not known. The owner had been feeding grain and hay on an oat stubble paddock. The cows were in forward store condition and the owner reported that they had all had easy calvings. The calves were born with spastic paralysis of the hind limbs, fixed in extension. There was no obvious pain reflex when the toes were pinched. One calf was unable to rise and had been bottle fed for 3 weeks in the hope that it might improve. The second calf was able to stand and propel itself along by hopping with the left leg abducted. If stirred up too much it would circle to the left. They were otherwise bright and alert and feeding normally.

The recumbent calf was euthanased. Brain and spinal cord were submitted for histopathology. There were no significant findings in brain sections. Sections of the spinal cord showed mild Wallerian degeneration of the lateral and/or ventral white matter tracts.

Differential diagnoses included bovine spastic paresis, sorghum toxicity (full feeding history unknown), bovine pestivirus and Akabane.

Bovine spastic paresis was thought to be the most likely diagnosis, and Dr Chris Bourke, Principal Research Scientist (Poisonous Plants), provided the following explanation of the condition:
The cause of this congenital condition remains unknown. An in-utero plant poisoning is possible. It does not appear to be a genetic disorder.

Although a congenital disorder, bovine spastic paresis presents neonatally and there is much individual variation in the intensity of the initial clinical expression. For this reason, owners give variable accounts of age of onset: some animals may be more obviously affected near weaning time than at birth, and in this case the condition is called 'late onset' rather than congenital.

The clinical sign that is most indicative of bovine spastic paresis is hyperextension of the hock and hind fetlock joints. Expression of the syndrome should also be asymmetric (one hindlimb more affected than the other), but not all clinicians or owners will pick up on this clinical detail.

The disorder is neurological and involves a very precise dysfunction: dysfunctional innervation by the tibial nerve of the gastrocnemius and superficial digital flexor muscles. These muscles are the hock joint extensors. I believe that this is an upper motor neurone dysfunction, specifically a central dopaminergic motor dysfunction, albeit a very precise one.

Confirmation of diagnosis should be a laboratory finding that essentially says there is very little wrong with the spinal cord (i.e. possibly mild Wallerian degeneration) and no significant findings in the brain. Bovine spastic paresis is a chronically progressive, irreversible, asymmetric limb paresis for which there is no associated anatomical neuronal pathology. If there is any astrocytic pathology (this remains a possibility), it has not yet been demonstrated.

For further information contact Gabe Morrice, DV Narrandera RLPB on (02) 6959 2322.

Abortion and stillbirths in cattle

High *Leptospira* microscopic agglutination test (MAT) titres have been recorded at Coonabarabran, Moree, Inverell, Bingara and Casino, all associated with recent abortions or stillbirths. In most of these cases, *Leptospira hardjo* titres were significantly higher than those for *Leptospira pomona*.

The Coonabarabran case showed one titre of 1600 to *hardjo* (< 50 for *pomona*), but there was also evidence of exposure to pestivirus. In Moree there were titres of 800, 1600 and 3200 for *hardjo* (< 50 for *pomona*), but also some fluke involvement and positive ELISAs for Akabane virus. At Inverell both serovars of *Leptospira*, Akabane, and possibly selenium deficiency were involved.

In Casino, investigation into five or six mid-term abortions in an unvaccinated beef herd revealed *hardjo* titres up to 3200 and pomona titres

to 400. Although *hardjo* has not been proven to be associated with abortions in Australia, there have been anecdotal reports that it can be. Investigations in this herd were negative for neosporosis and vibriosis, and showed past exposure to pestivirus. This evidence supports the likelihood that these abortions were associated with *hardjo*.

Additionally, there seems to have been an increase in the number of very high titres to *hardjo* in western areas in the past couple of years, whereas previously nearly all titres were for *pomona*. It may be that *hardjo* has only recently been introduced into the western areas and the higher titres are indicative of first exposure; the previously high titres to *pomona* may have been associated with the higher numbers of feral pigs seen in the past.

For further information contact Paul Freeman, Regional Animal Health Leader (Wollongbar), NSW DPI, on (02) 6626 1214.

Plant-associated poisonings in sheep

Chronic copper poisoning occurred on several properties in the Narrandera RLPB during the quarter. On one property around 50 sheep died. On another property 30 out of 260 four-year-old first-cross ewes died.

Lupinosis was diagnosed in sheep flocks in the Narrandera, Wagga Wagga and Gundagai RLPB districts. In Gundagai 100 out of 600 sheep died.

Seventy out of 630 maiden ewes died after grazing Albus lupin stubble in the Wagga RLPB. Cropping operations on this farm led to few paddocks being available for stock. The sheep were given supplementary feed while on the lupin stubble, but mortalities were not prevented. The paddock was subsequently sown with Whistler wheat without burning of the lupin stubble, meaning that there was a continued risk.

Phalaris poisoning was thought to be the cause of mortality in four out of 370 merino ewes on a property in the Wagga RLPB district in May. The mortalities occurred after access to phalaris. Clinical signs included head-pressing through fences and death within 12 hours. Extensive haemorrhages in the skeletal and cardiac muscle and extensive, severe pulmonary congestion, with froth in the bronchi, were observed on post mortem. A high ammonia concentration in the aqueous humour (3460 µmol/L (ref. 0–200 µmol/L)) supports a diagnosis of phalaris polioencephalomalacia (PE)-like sudden death.

Phalaris toxicity was suspected as the cause of death of eight out of 300 merino ewes in the Braidwood RLPB. A further 20 ewes exhibited a staggers syndrome. The ewes had been put onto a conserved phalaris pasture.

For further information contact Tony Morton, DV Wagga Wagga RLPB on (02) 6923 0900, or Bob Templeton, DV Braidwood RLPB, on (02)4842 2536.

Drench resistance in goats

A number of weaner goats in the South Coast RLPB had submandibular oedema and ventral oedema ('waterbelly') despite being drenched for liver fluke and intestinal worms. The goats had received closantel 2 months previously, triclabendazole 2 weeks previously, and abamectin, praziquantel, and selenium 1 week before submission of samples to the laboratory. The average faecal egg count was in excess of 2000 eggs per gram, with barber's pole worm *(Haemonchus)* constituting 99% of the larvae grown. There was no evidence of fluke infestation or *Nematodirus*, and there were very low levels of *Ostertagia* (1%).

Goats presenting with bottle jaw and anaemia in a herd at in the Moss Vale RLPB had faecal egg counts in excess of 6000, despite having been drenched with an injectable anthelmintic 30 days before. Equal numbers of *Haemonchus* and *Trichostrongylus* larvae were recovered.

A mob of 15 mixed-sex Boer goats in the Maitland RLPB had an average faecal egg count of 764 strongyle eggs per gram 2 weeks post-drenching with closantel. Unfortunately no larval differentiation was done to determine the worm type.

A mob of 5-month-old kids in the Moss Vale RLPB were showing signs of anaemia and scouring. They had been drenched 2 weeks previously with albendazole. The average faecal egg count for the mob was 1500 strongyles (72% *Haemonchus*, 22% *Trichostrongylus,* and 6% *Ostertagia*) and 60 *Nematodirus* eggs per gram.

Closantel is a narrow-spectrum drench used mainly for barber's pole worm control. In Queensland and the northern half of NSW, the level of resistance to closantel in barber's pole worm is high and widespread, but resistance is less common in other areas. There have also been rare reports of resistance to abamectin, a macrocyclic lactone drench.

Worm burdens in goats are a major problem in coastal areas of NSW. Relying solely on drenching to control worms in this species, in combination with the under-drenching that can occur if body weight is not assessed properly or the goats are not managed correctly at the time of drenching, can result in drench resistance.

Drenches should be tested for efficacy before their use in goats. Many drenches on the market are not registered for use in goats but can be prescribed for use, including a withholding period for meat and milk following treatment.

For further information contact Diane Ryan, Senior Regional Animal Health Manager (South Coast), NSW DPI on (02) 4640 6378.

Haemonchosis in lambs

A 25% mortality rate in a mob of crossbred lambs in the Cooma district was investigated. The mob had been grazing on forage rape, and nitrate poisoning was initially suspected by the owner. Post-mortem and laboratory testing of samples submitted showed normal nitrate levels but a very high *Haemonchus* burden. The owner had drenched the lambs with white drench a few days earlier.

For further information contact Alex Stephens, DV Cooma RLPB, on (02) 6452 1122.

Cattle reproduction investigations in western NSW reveal diverse problems

A series of cattle reproductive investigations in western NSW have identified a number of problems. Pestivirus, vibriosis (campylobacteriosis), phosphorus deficiency, calving difficulties after introduction from other areas or limited feed conditions, and possible sub-clinical botulism have been identified.

Programs are being designed to make use of Pestigard®, vibrio and/or botulism vaccines, together with management of cattle to improve nutrition, often by supplementing with molasses and phosphorus mixes.

These solutions will help raise the profitability of cattle breeding herds.

For further information contact Greg Curran, Senior Regional Animal Health Manager (Western Division), NSW DPI, on (08) 8088 9336.

Mortality investigation in poultry

An increase in the mortality rate of birds after 37 days of age in a commercial chicken shed triggered investigation in May. The mortality rate had been 0.1% per day in birds up to 37 days old, and then increased to a peak of 2% mortality per day in birds over 37 days old. The morbidity rate was low, with affected birds displaying discomfort, huddling, ruffled feathers and reluctance to move.

Post-mortem examination showed thymic and bursal depletion, kidneys swollen with urate accumulation, and swollen livers with distinct spots and yellowing. Histopathology revealed changes typical of infectious bursal disease. It is normal practice to vaccinate breeder hens so that maternal antibody protects the chick for the first 3 weeks of life, allowing time for seeding of B-cells into other tissues. When the chick becomes infected with the endemic strain of infectious bursal disease virus (IBDV) at 3 or 4 weeks of age the bursae are damaged but the bird is immunocompetent.

Significant kidney lesions were detected. These may have been due to a nephrogenic strain of infectious bronchitis, avian nephritis (but the birds were too old), or low water intake due to cold weather. Liver lesions were typical of 'spotty liver syndrome' (of uncertain aetiology). This disease is known to cause mortalities in the range of 1% to 5%.

A combination of hepatitis, nephrosis and IBD is likely to be responsible for the losses in this shed.

For further information contact George Arzey, NSW DPI, on (02) 4640 6402.

Vaginal prolapse in ewes

A number of cases of vaginal prolapse in ewes were investigated in June in the Hume RLPB. Of 300 merino ewes, 25 had lambed normally and 25 had prolapsed and required destruction. Overfeeding leading to overconditioning during pregnancy, hereditary predisposition, and oestrogenic clovers are being considered as the underlying causes. Hypocalcaemia was ruled out. Varying the ration to cut down on bulky roughage (to decrease intra-abdominal pressure) seemed to improve the situation.

For further information contact Brigit Pitman, DV Hume RLPB, on (02) 6040 4210

NOTIFIABLE DISEASES

Anthrax investigation

One case of anthrax was confirmed during April. Four of 280 beef cattle died on a Hillston district property. A ranger was called by the property manager after finding three dead cows. The following day a fourth animal was observed sick and died within hours. Smears taken from affected animals confirmed the presence of *Bacillus anthracis*. The property was placed in quarantine, carcasses were burned in situ, the Public Health Unit notified, and all in-contact stock vaccinated as per the NSW DPI anthrax policy. Sheep and horses were present on the property but not affected. Although there was no known history of anthrax on the property, it is located in the known endemic anthrax area of NSW.

Twelve investigations of mortalities during the quarter excluded anthrax as the cause of death. Four of these were in sheep, where alternative diagnoses included infectious necrotic hepatitis (black disease) and pregnancy toxaemia. The remaining eight exclusions were in cattle, where alternative diagnoses included coccidiosis in one case and acute haemorrhagic peritonitis in another.

Strangles

One case of strangles was reported in the Maitland RLPB district in June. Two riding school ponies were affected. Approximately 40 horses are on the property. Prompt isolation and treatment were effective in preventing spread to the other horses.

Strangles has been classed as a notifiable disease in NSW so that exports and international horse movements can take place.

Many countries to which we export horses require certification that the property of origin has been free from strangles for at least 3 months before export. (Some require certification of freedom from disease for up to 2 years.)

Under the Stock Diseases Act it is a legal requirement to report any case of strangles within 48 hours, in writing, to an inspector (including RLPB district veterinarians and rangers, and NSW DPI veterinarians and regulatory officers).

Notification may be made directly to Sarah Robson, State Equine Health Coordinator, NSW DPI. Mail address: Wagga Wagga Agricultural Institute, PMB Pine Gully Rd, Wagga Wagga, NSW 2650. Facsimile: 02 6938 1995. E-mail: sarah.robson@dpi.nsw.gov.au.

Notification may be made by the attending veterinarian, the diagnostic laboratory or the owner. All information is handled confidentially and is used only for export certification purposes. No regulatory action (such as property quarantine) is applicable to strangles.

Pony with strangles. Photo from O.L.I.V.E.R., University of Sydney

For further information contact Sarah Robson, State Equine Health Co-ordinator, NSW DPI, on (02) 6938 1967.

Avian chlamydiosis in a commercial squab flock

Chlamydophila psittaci and *Salmonella typhimurium* were found in samples submitted from a commercial pigeon flock in the Hume RLPB in May. Higher-than-normal death rates in juvenile birds were observed by the owner.

Chlamydiosis in poultry (including squabs) is notifiable and is a zoonosis. Current policy requires medication (tetracycline) and continued monitoring for *C. psittaci* until the infection is eliminated. OH&S measures (masks, gloves, eye protection) must be implemented by staff involved with husbandry and processing.

For further information contact Luzia Rast, Senior Regional Animal Health Manager (Southern Slopes), NSW DPI, on (02) 6938 1993.

DISEASE SURVEILLANCE AND CONTROL PROGRAMS

Enzootic bovine leucosis (EBL)

As at the end of June 2006, the EBL status of the NSW dairy herds was as follows:

MONITORED FREE	*970 herds (94.9%)*
BMT NEGATIVE	*17 herds (1.7%)*
NOT ASSESSED	*35 herds (3.4%)*
TOTAL	**1022 herds**

For further information contact Richard Zelski, NSW DPI, on (02) 4939 8959.

Johne's disease Market Assurance Programs (MAPs) as at 30 June 2006

	Herd type	*Results of status testing at each stage (number of herds)* MNI	MNI-V	MN2	MN2-V	MN3	MN3-V	TOTAL
AlpacaMAP	Stud	1		1		7		9
	Other	4		21		76		101
	Total	**5**		**22**		**83**		**110**
CattleMAP	Stud	61		46		45		152
	Other	74		146		244		464
	Total	**135**		**192**		**289**		**616**
GoatMAP	Stud	1		3		1		5
	Other	12		14		5		31
	Total	**13**		**17**		**6**		**36**
SheepMAP	Stud	25	8	26	6	53	4	122
	Other	19	17	28	27	138	20	249
	Total	**44**	**25**	**54**	**33**	**191**	**24**	**371**

Bovine Johne's disease (BJD)-infected herds in NSW as at 30 June 2006

RLPB	DAIRY	BEEF	TOTAL
Casino	16	14	30
Coonamble		1*	1
Forbes	1		1
Grafton	1		1
Hume	3	2	5
Hunter	1		1
Kempsey	4		4
Maitland	2	1	3
Molong		1	1
Moss Vale	2		2
Murray	11	1	12
Northern New England		1	1
Riverina	10		10
South Coast	15	1	16
Tweed Lismore	14	13	27
TOTAL	80	35	115

* Dairy heifers being reared on a beef property.

Transmissible spongiform encephalopathy (TSE) surveillance submissions by RLPB, 1 April 2006 to 30 June 2006

RLPB	DV sheep	DV cattle	Abattoir sheep	Abattoir cattle	Private vet sheep	Private vet cattle	Total sheep	Total cattle
Armidale	2						2	
Casino		2						2
Dubbo					1		1	
Gloucester						1		1
Gundagai		1						1
Moss Vale		1				1		2
Mudgee-Merriwa						1		1
Narrander	3						3	
Northern New England	1						1	
Northern Slopes		2						2
Riverina	1						1	
Wagga	3						3	
Total	**10**	**6**	**0**	**0**	**1**	**3**	**11**	**9**

All samples were TSE negative.

Continuing submissions to the National Transmissible Spongiform Encephalopathy Surveillance Program are encouraged. Cattle over 30 months and sheep over 18 months that exhibit neurological symptoms are eligible for sampling under the program.

For further information on TSE or BJD contact Sally Spence, NSW DPI, on (02) 6391 3630.

New staff

Charlotte Cavanagh is the Regional Animal Health Leader based at Bourke. Charlotte worked in private practice in Cootamundra before taking up the position as RAHL at Bourke.

Welcome back to **Catherine Taragel,** Acting Senior Regional Animal Health Manager (Central Slopes). Catherine will be the SRAHM for the Central Slopes while Julie Bolam is in the Falkland Islands for 2 years.

Paul Freeman is the Regional Animal Health Leader (Northern Slopes), based at Wollongbar. Paul was the District Veterinarian at Casino for 18 years, and before that he worked in private practice.

Catherine Taragel

Paul Freeman

Getting Information on Animal Diseases

This surveillance report can only convey a very limited amount of information about the occurence 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 Regional Animal Health Manager, Regional Health Leader, or Regional Veterinary Laboratory.

For Statewide information, contact NSW DPI's Animal and Plant Biosecurity Branch in Orange on (02) 6391 3237 or fax (02) 6361 9976.

For more information on national disease status, check the National Animal Health Information System (NAHIS) via the internet at: http://www.animalhealthaustralia.com.au/status/nahis.cfm

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Copies of NSW Animal Health Surveillance reports are available on the internet at: http://www.dpi.nsw.gov.au/reader/ah-surveillance

Bluetongue zones

There has been a minor change to the bluetongue zones in coastal NSW following the detection of a bluetongue seroconversion in a sentinel animal at Yarrowitch. This herd is located roughly mid-way between Wauchope on the coast and Tamworth inland and is in the surveillance zone, close to the boundary with the free zone. This site has been operating as a sentinel herd, with complete sampling on schedule this year. All 15 animals were seronegative for bluetongue in early January. When the animals were sampled in April, a single animal was weakly seropositive, probably seroconverting. A sample collected in May returned a clearly positive result.

At the April test five out of 15 animals had also seroconverted to Akabane, and the District Veterinarian commented that owners were complaining about an unusual increase in the insect population, including the presence of buffalo fly. Sampling of additional animals of similar age in the herd revealed another two out of 13 positive to bluetongue. These results are consistent with a low level of bluetongue virus transmission on the eastern fall of the Great Divide. On a recommendation from Animal Health Australia to the national Animal Health Committee, the bluetongue zone boundaries have been adjusted to take this activity into account.

For further information contact Debbie Finlaison, NSW DPI, on (02) 4640 6335.

Rural Lands Protection Boards

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