



NSW Agriculture



NSW Agriculture & Rural Lands Protection Boards

ANIMAL HEALTH SURVEILLANCE REPORT

November–December 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 western NSW rain has been patchy & light except in the far west which has had excellent rains and pastures look superb. Thunderstorm activity has been common. Large quantities of dry corksrew/speargrass (*Stipa* spp) dominate much of the central portions of the west. In addition to the fire risk, the very poor quality of this feed will probably cause malnutrition in weaner sheep and in cattle. In the early 1980s, weaner sheep died in numbers from starvation in the midst of vast quantities of corkscrew. Graziers have been advised of the risk and the remedies. In some of the woody weed areas, feed is starting to run out, which is not surprisingly given the numbers of agisted cattle.

Virtually all areas in the central- and north-west are blessed with an abundance of dry feed for the coming summer and livestock are in good condition in all districts. However on the northern tablelands, parts of Armidale, Glen Innes, Warialda and Gloucester and all of Tenterfield districts were drought declared during the period. Good rains are needed in this area for both feed and runoff to fill dam storages.

In the coastal areas of the Hunter region seasonal conditions have been very favourable and stock are in good condition. However further up the valleys, pastoral conditions can best be described as good and ground water supplies still below normal.

On the southern tablelands, a good body of feed in most areas has suddenly dried off following strong winds, high temperatures and low moisture.

David Kennedy
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Investigations of Suspected Exotic Diseases

Fatal Alimentary Tract Syndrome in Cattle

A large team involving George Perry, the District Veterinarian at Walgett, through to the Australian Animal Health Laboratory at Geelong investigated a significant cattle mortality near Collarenebri. Some 42% of two mobs of cattle of mixed sex and age became sick over a two week period. Three other mobs of cattle on the same property were unaffected.

Clinical signs included drooling saliva, depression, ulcerative lesions in the mouth and haemorrhages and necrosis in the oesophagus, abomasum and large intestine. Nose and eye discharges were also a feature. Young calves died quickly but older cows survived for several days before succumbing. Case fatality rates were 100% in young cattle and only slightly lower in adults.

Rinderpest and Malignant Catarrhal Fever were excluded and, although a viral cause was indicated by histopathology and the cases resembled an outbreak of bovine herpesvirus in Queensland in the 1970's, no viruses have been isolated. Various toxic causes are also being investigated.

Goats

Investigations of two incidents in goats on the north coast ruled out bluetongue and brucellosis. In the latter case, a positive Rose Bengal Test in a sick human patient had led to suspicions of brucellosis in the recently aborted doe.

Significant Disease Events

Anthrax

One of 83 mixed cattle grazing barley stubble died in early December on a property near Quambone that had had no previous history of the disease. Although it occurred near the western boundary of the district, this is the first recorded case of anthrax for over a decade in the Coonamble district.

Anthrax also caused the deaths of 2% of 600 Merino hoggets on a Condobolin district property. Although the property had previously had anthrax last January, a shortage of vaccine resulted in these hoggets not being vaccinated this year.

(Another two anthrax incidents have been reported in the Hay and Bourke districts in the first two weeks of January 1994).

Ephemeral Fever

Ephemeral fever has been occurring in Queensland since October and early cases were suspected on the far north coast in November in the Casino district. Cases have since been suspected in pockets as far south as Macksville. Confirmatory convalescent serology is being undertaken. As noted in previous reports the herd immunity of the cattle population, and in young stock in particular, in the north will have fallen as there has been no known spread of BEF infection in the last two years in the area.

Fireweed Poisoning

There has been a gradual spread of this weed from the north coast in recent years so that it is now prevalent as far south as Bega. One death and 3 sick animals in 80 mixed age Illawarra cattle at Kangaroo Valley have been attributed to fireweed poisoning.

Severe pyrrolizidine alkaloidosis has also been diagnosed in a group of dairy calves on the north coast and the incidence of poisoning appears to have also increased in cattle in the Gloucester district.

Grass seed damage

Abundant growth of *Stipa* spp in western NSW has caused several problems for sheep producers. These have included infections and reduced feed and water intake. A grass seed alert was publicised in the spring. To date there have been no serious mortalities or starvation due directly to *Stipa* but problems are expected. Flystrike in seed damaged sheep has been minimised by carrying out fly control prevention before the seed problem commenced, but some problems occurred when fly treatments failed and sheep had to be remustered through seed infested country.

Copper Deficiency

In a Coonabarabran cattle herd, weaners showing illthrift, harsh coats, paleness and mild lameness were all found to have deficient blood copper levels. On the north coast weight loss and diarrhoea was associated with copper deficiency in 18 herds.

Listeriosis

In the Hunter, two of 250 adult cattle died with pulmonary emphysema eight weeks after first being fed silage.

Disease Trends and Predictions

Haemaphysalis ticks have been abundant on the north coast and spread has been reported amongst some local cattle in the north-western inland.

Enteritis in young beef calves was a problem in December with a large number of cases associated with *Cryptosporidium*.

Worm problems in sheep have continued unabated throughout the year over much of the State. The Cooma district in particular is suffering severe problems with *Haemonchus* outbreaks. A record faecal egg count for the EMAI parasitology laboratory of 66 200, comprising 90% *Haemonchus* and 10% *Trichostrongylus*, was recorded for a 2-year old sheep on the Monaro. *Haemonchus* has also been detected in heavy burdens in the north and central west.

Cattle herds and sheep flocks infected with **Johne's disease** continue to be identified. New cattle herds were reported in Casino, Moss Vale and Bega districts and two more sheep flocks were found to be infected on the central tablelands.

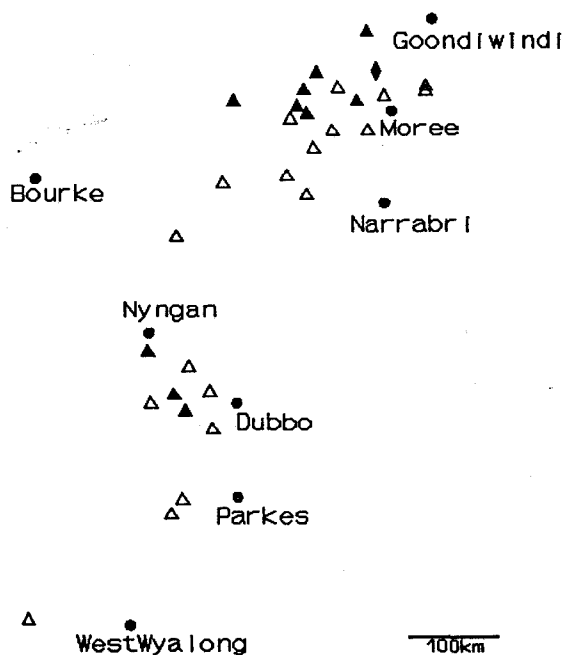
Disease Surveys and Studies

Protozoan Abortion in Cattle

With the assistance of RVL Wollongbar staff, Peter Harper, Senior Field Veterinary Officer at Grafton has reviewed abortion cases investigated on the north coast since 1983. Protozoal abortion was confirmed in 125 cases in 115 beef and dairy herds. It was confirmed in one quarter of abortion submissions in which a full foetal examination is undertaken and is the most commonly diagnosed cause of bovine abortion on the north coast, ahead of "vibriosis" (8% of foetuses). American work has implicated *Neospora caninum*, or a similar protozoa, as a cause of abortion and this has been confirmed by immunoperoxidase staining in two cases on the north coast. (Contact: Peter Harper, Grafton, 066-420467).

Flood Plain Staggers

As noted in the last report, Terry Bertozzi of the South Australian Research and Development Institute surveyed blown grass along the western slopes and plains. *Agrostis avenaceae* was found infested with nematodes at several sites between Dubbo and Nyngan and also to the west of Moree. However none of these were infected with *Clavibacter toxicus*. At one site north east of Moree annual beard grass (*Polypogon monspeliensis*) was discovered which was infected with both the nematode and bacteria. On the map, triangles represent sites where blown grass was found and blocked triangles indicate sites where nematodes were also found. The diamond is the infected annual beard grass site.



Since the isolated cases in a cow and calf in the Walgett district in October, no other cases of flood plain staggers have been reported. (Contact: Laurie Pryde, Dubbo, 067-811275)

Developments in Disease Recording and Reporting

Fieldvet

Steve Dunn, Senior Field Veterinary Officer Gunnedah, and Evan sergeant, District Veterinarian Tamworth, ran a training session of *Epi Info* and previewed likely developments of disease recording using *Epi Info* version 6 which should be available in 3 months. Training was also undertaken on how to carry out more advanced analysis of data.

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.

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