

Animal health and climate change

The Central Tablelands region is located in central NSW, and includes the major towns of Bathurst, Cowra, Lithgow, Mudgee and Orange.

The region has a number of natural resource assets and is home to a diverse range of agricultural industries. This information is part of a series of factsheets highlighting changes and options for the region associated with climate change.

Animal health consequences and adaptation options

The NSW Government's Central West and Orana climate change snapshot notes that temperatures have been increasing in the Central West and Orana since about 1970. The region is projected to continue to warm in the future averaging about 0.7°C in the near future to about 2.1°C in the far future.

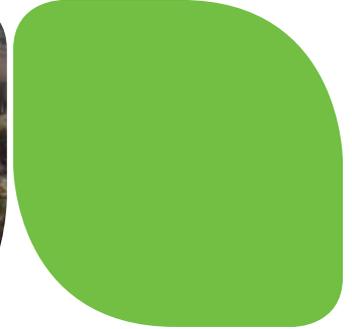
The Central West and Orana already have considerable rainfall variability which is likely to increase with decreased spring rain and increased autumn rain.

Increased temperatures and a more variable rainfall will mean that livestock producers on the Central Tablelands will need to be even more adaptable and resilient than in the past.

Drought planning including fodder conservation, improved water supplies and an appropriate enterprise mix (including some trading stock and a younger herd or flock structure) will be even more important.

Pasture growth is highest in the spring on the Central Tablelands, underpinned by warmer weather and adequate soil moisture. A decrease in spring rains could substantially reduce overall farm productivity with serious consequences for our livestock producers. It is of little compensation that some conditions such as bloat will be less of a problem in the future.

Central Tablelands livestock producers should consider continuing the trend towards pasture management that encourages deep rooted perennial species that are capable of responding to summer rain and can access deep soil moisture. These pastures are also known to be more capable of sequestering carbon.



*Bushfire.
Photography – Bruce Watt*

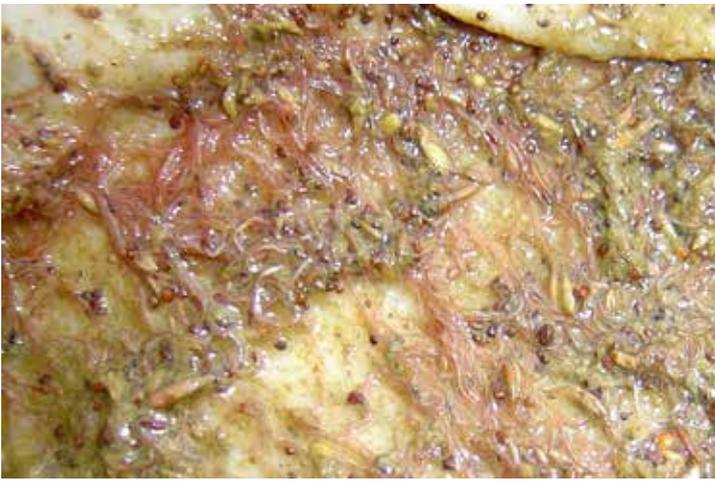
Summer weeds such as the Panic species, Heliotrope and Tribulus (caltrops or cathead) can cause liver disease in livestock are likely to be favoured by a regime of increased summer rains. Good quality summer responsive pastures compete with these weed species.

As summer rain is forecast to increase but with more variability. A range of vector-borne animal diseases are likely to increase in prevalence. Akabane virus, the cause of skeletal and nervous system abnormalities in calves and bovine ephemeral fever, which causes sickness and sometimes death in cattle are both experienced in the Central Tablelands intermittently.

This intermittent exposure in livestock without immunity can cause disastrous outbreaks of disease. In the short term these disease outbreaks are likely to become more severe but conceivably with substantial climate change the viruses may become endemic to the region, decreasing the risk. Bluetongue virus, currently to the north of our region, could spread south with impacts both on animal health and our exports from the region.



Calf with arthrogryposis. Photography – Bruce Watt



An example of *Haemonchus*. Photography – Bruce Watt

Internal parasites are one of the most important animal health problems in grazing livestock in the Central Tablelands. Increased summer rainfall is likely to exacerbate *Haemonchus* (barber's pole worm) outbreaks but decreased winter and spring may reduce the problems experienced with other internal parasites, such as *Ostertagia* (small brown stomach worm) in cattle, *Teladorsagia* (small brown stomach worm) and *Trichostrongylus* (black scour worm) in sheep.

The forecast reduced winter and spring rain, less snow and warmer nights may reduce lamb mortality and the loss of sheep off-shears. Lamb mortality is a multi-factorial problem with exposure a contributor.

Fires are also a hazard for producers in the Central Tablelands. The forecast increased frequency and intensity of fires will mean that livestock producers will need to be better prepared for fires. This may include the provision of safe areas, laneways and other fire reduction measures.

Further information

For more information contact your nearest Central Tablelands Local Land Services office on 1300 795 29 or visit

www.ils.nsw.gov.au/centraltalelands

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For updates go to www.ils.nsw.gov.au/centraltalelands