

## COPPER, THE SILENT THIEF

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**THE FERTILISER PROFESSIONALS**

*"Baubles of Knowledge"*



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Recent reports from our client base and local vets indicate widespread copper deficiency in livestock throughout SW Victoria and SE South Australia.

Symptoms such as sway back lambs and broken bones indicate a situation that is in the extreme range of deficiency.

Very significant production losses will have caused havoc well before these symptoms become apparent.

Copper levels in sheep and cattle drop to a low point around June each year, which coincides with a winter lambing autumn/winter calving regime that is common in our region.

Wet winters like we have seen this year tend to exacerbate copper issues.

Animals accumulate copper at other times of the year and store it in their livers. Soil ingestion can allow animals to absorb some copper over summer if pastures are bare enough, but when we get springs like we had in 2022/23 we often fail to get pastures bare enough over summer for this to occur. There has also been a recent swing to metal grain feeders/lick feeders that reduce the opportunity for soil ingestion.

If you suspect your livestock have symptoms of low copper levels you should immediately seek the services of a local vet and get some tests done and take appropriate action.

Liver samples are the most accurate way of checking livestock for trace elements such as copper. Regular monitoring can be easily undertaken by most livestock managers. Winter is a time when animal losses are high, so when an animal dies or is slaughtered for home consumption or if an accidental loss occurs (sheep breaking necks in yards for example) it's pretty easy to extract a sample of its liver and place it in a zip-lock bag, freeze it and give it to your vet for analysis when convenient. Simply label the samples with age, cause of death (if known), date, pregnancy status etc.

Soil and tissue testing can be of some use as well, but liver samples appear to be a more accurate method of assessing copper levels. Both are good.

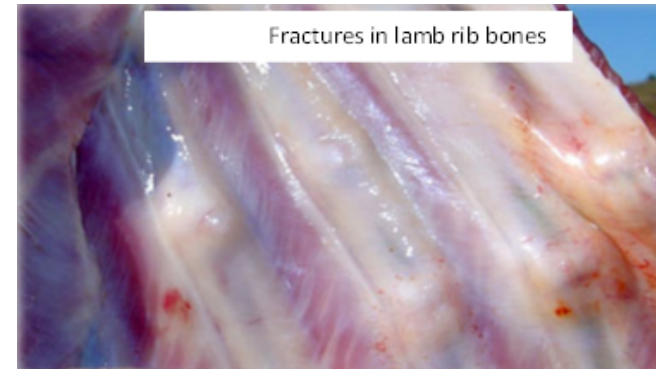
It was a common and recommended practice to apply copper and molybdenum every fifth year to grazing systems in most of SW Victoria and SE South Australia. Recently there has been a trend towards simply relying on regular soil and tissue testing to decide when to apply these essential trace elements. Copper for the animals and molybdenum for strong clover growth and nodulation. Maybe it's time to return to regular applications every 5 years.

Excess molybdenum in pastures restricts animals ability to absorb copper, so applying molybdenum on its own can have dangerous animal health impacts. Applying lime can give pastures a quick spike in molybdenum levels and we often see copper problems following a lime application.

## TREATMENT:

Once diagnosed, copper can be administered to sheep and cattle in various ways. Seek and take advice from your vet on this.

The other method is to apply copper with your fertilizer. Speak to the agronomy team here at Vickery Bros about how best to do this. Copper applied with fertilizer can be effective for several years. Current cost to apply 1kg of copper/ha is \$33/ha on top of your normal fertilizer cost, to apply 2kg of copper/ha is \$65/ha. It may seem expensive at first glance, but it can provide all of your livestock with adequate copper levels for 5 or 10 years. So, if you work it out on a cost/head basis over that time span, it's really quite cheap. Sub-clinical losses from copper deficiency can be quite high. Please note that short term animal treatment is usually required until copper applied with fertiliser becomes available to the animals.



***From all the team at Vickery Bros we wish you a Merry Christmas & A Happy New Year!***

***We look forward to catching up with everyone in 2024.***