

Copper deficiency

What you will see

	Wool	Body weight	Bones	Muscles	Death
All ages	Decreased wool growth, wider crimp, more lustre, less strength	Decreased growth rate			
Lambs born to deficient ewes			Rib and leg fractures, swayback	Weak, uncoordinated in hind legs	Slow

Impact

- All sheep and any number can be affected, but it is worse in young sheep.
- Early treatment is successful.

Likelihood

Copper deficiency is not widespread in Australia, but it can cause decreased wool production and death in the offspring of affected sheep. It occurs according to:

- soil type: coastal sandy soils, sandy loams or swampy peats with high molybdenum.
- pasture type: young, grass dominated, top dressed with molybdenum or lime, in winter and early spring.

Strategic prevention

Carry out pasture tests for copper availability and test young sheep from winter to early spring for deficiency (pasture tests won't reflect animal levels).

Get advice on which of the following supplementation options best suits your area:

- top dressing with copper fertiliser.
- feeding sheep with annual copper oxide intra-ruminal pellets.
- copper injections in sheep if molybdenum is high.

Tactical response

Quickly seek professional diagnosis and advice on treatment options. These include:

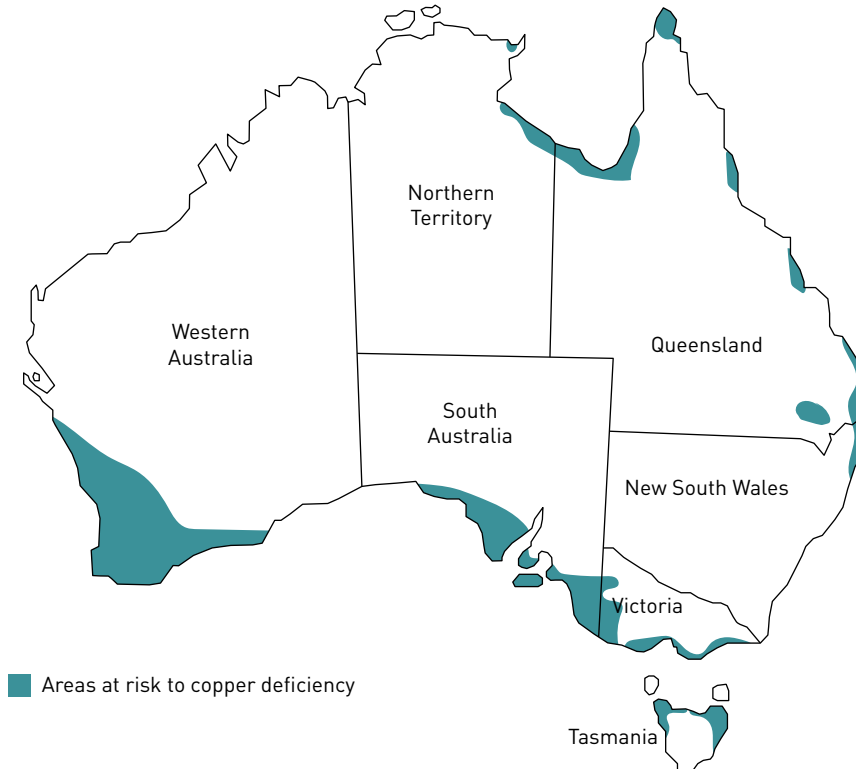
- holding off grazing deficient pastures until they age in summer.
- copper injections for a short-term boost.
- slow-release copper oxide intra-ruminal pellets for 6 to 12 months.



TIPS AND INFORMATION

- Seek professional advice on whether your property is copper deficient as variations occur.
- Seek early diagnosis if deficiency is suspected and provide a supplement for affected sheep.
- **Warning!** Copper is highly toxic so do not supplement without a diagnosed deficiency. Follow product labels for age of sheep suitable to be pelleted and don't use drenches, licks or water treatments as the dose cannot be managed.

The distribution of copper (Cu) deficiency in Australia



Reprinted from: C.M. Donald and J.A. Prescott (1975), Trace elements in Australian crop and pasture production, 1924-1974 in Trace elements in soil-plant-animal systems. Editors D.J.D. Nichols and A.R. Egan. Academic Press Inc. New York; pp. 7-38. Adapted by AWI and MLA.

Resource links

MMFS Tool 11.7 Diagnosis and management of trace element deficiencies

New South Wales

Assessing stock feed additives and mineral supplements

Queensland

Copper deficiency in ruminants

South Australia

Sheep diseases – the farmers' guide

Victoria

Trace mineral deficiencies

Western Australia

Copper deficiency in sheep and cattle

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