



CHAPTER 4 - HEALTH

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Redwood and giant sequoia have a justified reputation for being healthy species, with no major insect or disease problems.

There has been some anecdotal evidence that pruning can allow entry of a native longhorn borer or huhu beetles, *Prionoplus reticularis*, whose tunnels severely down-grade the value of the sawn timber. Attack from these insects is only in the heartwood, with entry gained through dead branch stubs and/or stem damage which exposes heartwood. The incidence of attack is unknown, but expected to be sporadic rather than constant. This problem has been more commonly reported from warmer areas (Northland, Bay of Plenty) but the extent of this risk has not been objectively quantified.

The New Zealand drywood termite, *Kaoltermes browni*, are secondary colonisers, obtaining entry to the dry heartwood through the bore holes of other insects. Dead branch stubs/bark encased knots provide access past the sapwood

band for the lovers of the dryer heartwood. Significant damage to the heartwood can result from the termite colony and associated infection and rot. Stand management which minimises dead branches could be expected to reduce the risk of such attack.

Growing tips of redwood have suffered some leaf-roller damage, but this has not been of major concern.

A canker fungus, *Botryosphaeria* has been reported to cause minor damage on both redwood and giant sequoia. It has been reported that seedlings in nurseries can have problems with botrytis. Cypress canker has been recorded on giant sequoia, but its impact is unknown.

Possoms can create damage to leaders in some locations and it is prudent to control populations if establishing redwood plantations. Cattle can also cause bark damage in young stands.

Key Points

- Redwood is generally a healthy species in New Zealand situations.
- Dead branches can offer entry points to borers.
- Possoms can cause some leader damage on young trees.

Suggested reading:

Cornell, 2002

Knowles and Miller 1993

