Dead Tree Detective

IS IT DIEBACK?

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Hawkesbury Institute for the Environment

There have been a number of well-documented dieback events in Australia where many Eucalypt trees die across a landscape without any obvious underlying cause. One long-term example is the <u>New England Dieback</u>, where millions of eucalypts died on the New England tablelands (NSW) during the 1970's and 1980's and is continuing to this day. Another example is <u>the dieback of Manna Gum</u> (*Eucalyptus viminalis*) on the Monaro tablelands since the early 2000's.

There are a number of factors that could be involved in these diebacks. First, they are often associated with agricultural practices, such as tree clearing, fertilisation, exotic pasture grasses, and livestock trampling, all of which change the environment around the trees. Second, droughts can stress the trees, and in their new environment they may find it hard to recover. Third, insects may repeatedly defoliate these stressed trees. In the New England and Monaro cases, Christmas beetles and weevils were found attacking the trees - but we still don't understand what caused these diebacks to start in the first place. Recording dieback as it is observed will be invaluable to help understand why it occurs.

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