

Finding out why iconic WA tree is on the decline

Researchers from Murdoch University's State Centre of Excellence for Climate Change, Woodland and Forest Health have been awarded a three-year grant to explore the causes of the recent decline in marri (*Corymbia calophylla*) stands in southwestern Western Australia, and help formulate management solutions.



Credit: Cas Liber/Wikimedia Commons

‘We’ve seen dramatic forest changes due to the significant decline of tuart, wandoo, jarrah and peppermint. As a keystone species, the continuing collapse of marri trees across the South-West will likely have dramatic consequences for South-West ecosystems,’ said the director of the centre, Professor Giles Hardy.

‘Biodiversity loss, dangerously high fuel loads and increased wildfires are just some of the outcomes to be expected in the future.’

Marri is a member of the Myrtaceae family, which include eucalypts and other well-known Australian native species. Through the \$275,000 Australian Research Council (ARC) linkage grant, researchers will construct a detailed description of the decline process, which will take into account everything from tree physiology, nutrition and pathology to the role of forestry.

‘Deciphering the complex processes involved in tree decline is difficult because of the manner in which stress factors interact and interrelate. Decline isn’t a straight line and can’t always be traced to one factor,’ Professor Hardy said.

‘Though decline process descriptions require a great deal of time and research, they are an invaluable tool in finding sustainable management solutions.’

Professor Hardy said protecting marri had many underappreciated benefits.

‘People have to understand how tree decline affects their everyday lives, from the costs incurred by shires and councils

for tree and limb removal to impacts on secondary industries, such as the apiary and honey industry.

‘Honey production from marri has declined approximately 70 per cent since 2008.

‘Even more, we need to consider the positive social impacts conservation brings. Seeing WA’s iconic trees dying can be devastating for communities.’

Administered by Murdoch University, the ARC linkage grant also involves the Department of Environment and Conservation, Cape to Cape Catchments Group and Alcoa of Australia.

Source: Murdoch University

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