Administrative response to recommendations from the Independent review of Bell miner associated dieback

NSW Environmental Trust

Table 1   **Summary of revised recommendations ordered by assessment of importance**

#	Recommendations	Trust Response
1	Adopt the causal model of this review as a working hypothesis of BMAD in NSW.	Accepted.
2	Establish a BMAD research and development program to answer a series of questions in a logical sequence to determine best practice management.	The Trust has considered these recommendations, and introduced a Tree Eucalyptus Dieback stream under the Environmental Trust's contestable Research Grant Program. This new funding priority aims to address the broader issue of tree dieback in NSW, including BMAD.
3	Develop, test and refine a decision-support toolbox for land managers for the identification, prevention and treatment of BMAD.	
4	Monitor BMAD across NSW using the latest survey and modelled data.	
5	Publish the causal model online and update it regularly based on analysis of primary data.	
6	Support public submissions of BMAD-affected areas to aid mapping.	
7	Analyse the overlap of mapped areas of BMAD with threatened flora and fauna distributions. Where possible, use modelled BMAD mapping to extend the analysis across NSW.	
8	Analyse the economic impact of BMAD on forestry operations in state-owned forests.	
9	Monitor and publish cost- and benefit-related information from all BMAD interventions to inform future guidelines for prevention and treatment.	
10	Complete aerial mapping of BMAD for higher-risk areas of NSW. Prioritise areas with known high density of bell miners.	
11	Analyse existing BMAD mapping to identify the best risk indicators or preconditions for BMAD. Develop a BMAD risk map or site-based assessment process using the results of that analysis.	
12	Develop a research program on lantana control.	

Table 2 **Summary of recommendations related to the proposed decision-support toolbox**

#	Recommendations	Trust Response
T1	Develop and implement guidelines to minimise the establishment or spread of BMAD in areas where disturbance to the canopy is unavoidable.	Accepted. The Trust has invested in further work to address tree dieback, with Untangling the Causes of Tree Dieback: Planning for Future Survival aiming to further address knowledge gaps in declining ecosystem health due to dieback in New South Wales.
T2	Re-establish a canopy as soon as possible after disturbance to limit unnatural understorey density.	
T3	Conduct ongoing management of invasive weeds, particularly those that minimise natural regeneration and can act as superior nesting sites for bell miners.	
T4	Develop and implement guidelines for appropriate fire regimes to minimise the establishment of BMAD where fire management is applied. Note that a significant proportion of BMAD sites would not have had fire at regular intervals so this needs to be carefully implemented using the best available science and a process such as HotSpots (http://hotspotsfireproject.org.au).	
T5	Conduct site assessments to ensure that bell miners are present and psyllids or other insects are the primary cause of dieback prior to investment in BMAD interventions.	
T6	Consider not intervening to address BMAD where the prevailing vegetation community is naturally dense in the understorey or mid-storey. BMAD may be a natural process in some areas.	
T7	Assess the viability of the seedbank for rehabilitation without planting at those sites with unnaturally dense understorey and/or mid-storey.	
T8	Consider culling bell miners followed by site rehabilitation at sites with high-value assets being impacted by BMAD (e.g. threatened flora or fauna).	
T9	Support ongoing learning and improvement within the BMAD land manager community. Publish the products of this review online, including the causal model, case studies and guidelines. Update the products periodically with new evidence, including through submissions from the BMAD land manager and research community. Once a land manager decision-support toolbox and guidelines for prevention and treatment of BMAD have been developed, design and implement a training program and associated resources. Examples may include provision of bell miner recordings for identification purposes or guidance on the appropriate use of a splatter gun to treat lantana.	
T10	The likely viability of different BMAD interventions based on the area affected should be included in a decision-support toolbox for land managers.	