

Wombat Ridge Nature Reserve Fire Management Plan



2023-2024

1. Cultural Burning

- We incorporate Indigenous cultural burning practices as part of our fire management strategy. These burns are conducted using Traditional Ecological Knowledge to achieve ecological, cultural and catastrophic fire risk reduction objectives.
- We have focused on targeted burning in areas with over-abundant sedge grasses, and around the base of high-value and emerging priority trees to reduce the risk of canopy fires. This has extended to cultural burning in areas to on the northwest facing slopes of the property to reduce fuel loads and reduce the risk of canopy fires.
- We have an established operational burn plan that integrates Indigenous knowledge and fire management expertise to maximise the benefits of cultural burning.



Figure 1 Post cultural burn on north-west facing slope



Figure 2: poisoning invasive serated tussock grass reduces fire risks



Figure 3: Burning over abundant sedge grass reduces catastrophic fire risks

2. Integrated Weed and Vertebrate Pest Management

- We continue our integrated weed management practices, including regular volunteer weeding bees to identify and remove invasive plant species like blackberry seedlings, serrated tussock grass, thistles, and lambs' tongue.
- We are implementing a three-year integrated weed spraying program funded by the NSW BCT grant. This program targets the degraded areas and selectively sprays over the following years to minimise weed regrowth.
- We coordinate our weed management efforts with firebreak maintenance and fuel reduction activities to enhance overall fire hazard reduction.

3. Track and Fire Break Management

- We regularly inspect and maintain tracks to ensure they are clear of vegetation and debris that could act as fuel during a bushfire.
- We use dead wood to close and regenerate unnecessary tracks and clearings that encourage unauthorised visitor entry to the property, composting the material to support termites and reduce the overall fuel load.



Figure 4: Cultural burning along tracks widens their containment value

4. Protection of Old-Growth Trees and other key assets

- We have identified and mapped old-growth trees that have nesting potential and artificial nests for threatened species, such as Glossy black cockatoos and Gang gang cockatoos.
- We have established fire risk reduction zones around these old-growth trees to prevent excessive build up of dead wood and leaves and reduce the risk of fire getting into the canopies and nesting sites.
- We have implemented a nest box installation program to replicate old-growth tree hollows for hollow-nesting species in areas where natural hollows are scarce.
- We regularly monitor the success of the nest boxes and work with experts to optimize their design and placement.
- We selectively burn around large termite mounds to protect them from catastrophic fires and ensure termite populations are viable and healthy for their composting and fuel reduction role in the ecology.



Figure 5: Cultural burning protects this termite mound and tree with Gang Gang nest box.

5. Early Warning

- We communicate closely with neighbours on potential fire risks and evacuation procedures.
- We integrate cultural burning activities into our early warning system to inform stakeholders and the NSW Rural Fire Service about planned burns and their ecological significance.

6. Emergency Response Plan

- We have an emergency response plan that includes evacuation routes in the event of fire and specific protocols for managing cultural burns and their effects on the landscape.
- Because no-one resides permanently at Wombat Ridge we also have a policy of not visiting or staying at the site during Extreme bush fire risks.
- We coordinate with local fire services and emergency agencies to ensure a coordinated response to bushfire.

7. Community Engagement and Awareness

- We conduct community engagement activities to raise awareness about the importance of cultural burning for ecological health and fire risk reduction.
- We encourage collaboration with neighbouring landholders to promote the benefits of working together on invasive species management, cultural burning, and fire preparedness.
- We have invited the NSW Rural Fire Service to attend cultural burns at the property. This shares the benefits of the burning but has also built and maintained our good relations with the RFS and its local captain.

8. Regular Monitoring and Review

- We monitor the impacts of our cultural burns, weed management, and track maintenance regularly to assess their effectiveness in reducing fire hazards and supporting biodiversity.
- We review our fire management plan annually and update it as needed to adapt to new challenges and opportunities, including lessons learned from cultural burning practices.

9. Post-Fire Recovery

- We plan for post-fire recovery measures, including habitat restoration, erosion control, and monitoring of wildlife recovery, with a particular focus on supporting threatened species.
- During the 2019-2020 bushfires our property was not directly affected. But our monitoring showed an increased incidence of native species suing our property for shelter. We provided them with additional water sources and also scaled up fox baiting to counter the effects of invasive species.
- We collaborate with research institutions to study the effects of cultural burning on the reserve's ecosystem and implement adaptive management strategies.

By integrating cultural burning, weed management, track management, and protection of old-growth trees into our fire management plan, Wombat Ridge Nature Reserve enhances its fire hazard reduction efforts while supporting biodiversity and cultural values. The plan is regularly reviewed and updated to ensure its effectiveness in protecting the reserve's ecological assets and promoting cultural practices that contribute to its conservation.



Figure 6: Xanthorrhoea respond well to cultural burning

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