Wilderness Australia submission to the Draft National Recovery Plan for Greater Gliders

Protected Species & Ecological Communities Branch
Department of Climate Change, Energy, the Environment & Water
GPO Box 3090
Canberra ACT 2601

Via email: recoveryplans@dcceew.gov.au

19 December 2025

Summary

In 2016, the southern greater glider was first identified as threatened. Four years later, the Black Summer Bushfires wiped out almost a third of its habitat, a key driver of the species classification to Endangered in 2022. Despite these observed markers of decline, state logging corporations have continued to destroy, degrade and severely fragment greater glider habitat.

Native forest logging is forever at odds with the greater glider, a species that depends on the mature, productive and intact forests that loggers prefer. Logging itself is a direct threat to the greater glider, but it also exacerbates other key threats such as bushfires and climate change.

Wilderness Australia urges the Federal Government to recognise the catastrophic effects that native forest logging has on greater glider habitat, both directly and indirectly. This recovery plan has the power to turn the greater glider's trajectory away from extinction, but only if it does not turn a blind eye to the central role that native forest logging continues to play in this species decline.

Critical habitat

The greater glider was once commonly found across eastern Australia, but its population continues to rapidly decline due to habitat destruction and fragmentation. The survival of this species hinges on the protection and restoration of native forests. However, as greater glider habitat traditionally overlaps with areas of forest designated for harvesting, large-scale protection cannot be achieved until there is an end to native forest logging.

Native forest logging is a destructive practice that erodes current and future greater glider habitat simultaneously. Greater gliders rely on suitably sized tree hollows (>8 cm diameter) for denning which can take centuries to form. Trees logged during harvesting remove this important habitat feature and diminish the recruitment of future hollow-bearing trees. Additionally, logging disrupts canopy cover which hinders greater glider movement and can increase risks of predation. Long-term studies in Victoria have seen greater glider populations decline up to 77% in areas of logged forests (WWF-Australia 2020).

Key habitat features of the greater glider should be modelled across south-east Queensland, eastern NSW and eastern Victoria to provide a tenure-free map of areas needing urgent protection and restoration.

Protecting refugia and strongholds

Greater gliders are mostly found in cool, wet, high-elevation forests, as they have a particularly low tolerance for high temperatures. In temperatures above 35 C, greater gliders may experience severe heat stress. This reduces overall health and fitness, inhibits growth in juveniles and in some cases can lead to death. Greater gliders have also been found to remain in their dens during high temperature nights, foregoing food entirely (Youngentob et al. 2021).

The stable micro-climate provided by many escarpment forests, along with other areas of climate refugia, will only become more critical to the survival of the greater glider as the impacts of climate change worsen. However, many of these areas are still zoned for logging in NSW.

Case study – three stronghold populations in southern NSW State Forests

For the past two years, Wilderness Australia has been surveying for greater gliders in southern NSW. We've collected data from multiple State Forests and have so far identified three areas as high density greater glider habitat: Tallaganda, Badja and Glenbog State Forests.

These areas are located along the crest of the Great Dividing Range and provide a stable and cool microclimate that greater gliders prefer. In the case of Tallaganda and Glenbog, the majority of the area remained unburned during the Black Summer Bushfires.

Despite historic logging in some sections, these state forests have the most stable and resilient populations relative to other forests in the surrounding landscape. They are now greater glider strongholds, or source populations. With the right recovery plan, these populations could repopulate forests with lower densities of gliders, and even areas that have experienced local extinctions.

However, parts of Glenbog State Forest are due to be logged in early 2026, and despite an informal agreement between community groups and Forestry Corporation NSW, Tallaganda and Badja could technically be logged at any time.

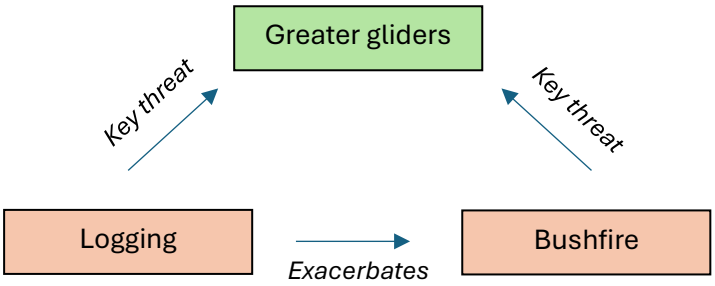
The immediate protection of these greater glider stronghold forests, along with any other high-density greater glider areas identified, should be the highest priority of this recovery plan.

Fire

Greater gliders are particularly sensitive to fire. Severe bushfires can lead to mortality and significantly alter the habitat of remaining gliders. It's anticipated that fire frequency and severity will only worsen as a result of climate change.

The Draft Greater Glider Recovery Plan ('the Draft') notes that *"habitat clearing and fragmentation can increase the negative impacts of fires by limiting the movement of greater gliders and reducing their ability to recolonise burnt areas (May-Stubbles et al. 2022)"*. However, it's critical to also acknowledge the role logging and disturbance plays in amplifying bushfire danger.

Lindenmayer and Zylstra (2023) find that logging and other disturbances lead to an increased understory fuel load, denser regrowth and drier and warmer forests. These factors modify the existing vegetation structure and microclimate, increasing forest flammability. For example, during the Black Summer bushfires, young regrowth forests burned hotter and faster than the adjacent old-growth forests (Lindenmayer & Zylstra 2023).



Conclusion

The following habitat requirements of the greater glider, identified by the Draft, are directly jeopardised by native forest logging:

- Cool and intact forest with a stable microclimate;
- An abundance of hollow-bearing trees (150+ years old);
- Eucalypt trees greater than 30cm diameter at breast height for feeding; and
- The retention of mature trees to ensure the development of future hollows for denning.

A national greater glider plan that seeks to recover the population cannot include provisions for native forest logging in any form. Any conservation efforts that are developed through this plan will be severely undercut as long as the logging and fragmentation of greater glider habitat continues.

The immediate protection of greater glider habitat is essential to the species survival, both in the short- and long-term.

Wilderness Australia would be eager to contribute to the further development of this recovery plan and to provide additional information about known stronghold areas.

References

Lindenmayer, D. & Zylstra, P. 2023. Identifying and managing disturbance-stimulated flammability in woody ecosystems. *Biol Rev Camb Philos Soc*. 2024 Jun;99(3):699-714. doi: 10.1111/brv.13041.

WWF- Australia. 2020. Destruction of greater glider habitat jumped by 52% after vulnerable listing. https://wwf.org.au/news/2020/destruction-of-greater-glider-habitat-jumped-by-52-after-vulnerable-listing/?utm_source=chatgpt.com

Youngentob KN, Lindenmayer DB, Marsh KJ, Krockenberger AK and Foley WJ. 2021. Food intake: an overlooked driver of climate change casualties?. *Trends in Ecology and Evolution*, volume(8):676–678, doi:10.1016/j.tree.2021.04.003.