Position on Planned Burns

A fire ecology strategy needs to be developed and implemented that protects and enhances our biodiversity and is based on the best-available scientific evidence*

The government needs to be open and honest with the public and communicate in ways that will replace ignorance and fear with understanding[15,23,25]. Specifically, there is a need to publicly

- **Address the misconception that fuel-reduction burns protect built assets, as overwhelmingly, the scientific evidence does not support this.** Overwhelming evidence exists that burning bushland any distance from built assets will *not* protect these assets in a wildfire [4,10,21,22,23,24,25,26,27].
- **Acknowledge current burning regimes are seriously damaging our environment and threatening our biodiversity** [5,6,7,8,9,10,11,12,13,14,15,16] and in many case cause devastation to plant and animal communities that will take decades to recover [17,18].
- **Acknowledge that prescribed fire can select for fire-prone flora species, making some types of vegetation more flammable than they otherwise might have been** [1, p298]. While decomposition of the litter layer may make fuel reduction burning unnecessary [20] frequent burning can destroy the organisms that decompose that litter, resulting in rapid accumulation of new growth and litter requiring further burning, thus perpetuating a dangerous cycle[1].

There is a need to monitor burn sites for their impact on wildlife and biodiversity. Along with other organizations and scientists [16,28,29], FoGL highlights the importance of short- and long-term monitoring in evaluating the impact of prescribed burns on our wildlife and biodiversity. There is evidence that many animals that initially survive a fire subsequently die because of limited food and shelter or by increased predation due to lack of vegetation [6,16,30,31,32,33].

Establish state-wide and national databases where data from short- and longer-term monitoring of fire regimes and their effects can be stored and accessed by researchers and the community. Protocols for the long-term monitoring of fire regimes need to be developed and implemented [16,28,29].

The community has a right to know what is presumably being gained and what is being lost in every prescribed burn. A prescribed burn might be hugely beneficial for one species but put another at risk. The community has a right to know how these competing values are prioritized [6,7] and we must be willing to acknowledge the trade-offs [34]

The scientific evidence that a particular ecological burn is necessary, or recommended, for a particular species should be made public, including

- The parameters of the particular burn
- Scientific evidence that this particular burn is expected to improve biodiversity while doing no harm to wildlife.
- Indicator species, focal species, thresholds in levels of native vegetation and how they were measured.

A comprehensive understanding of fauna responses to fire regimes needs to be established. Often plants are used as surrogates in planning fires [14]. This is acknowledged by the scientific community as having unknown [6,33,35] and sometimes devastating consequences [14,32,36]. FoGL calls for more research on fauna responses to fire.

Regarding 'fuel-reduction' burns, plant species targeted as needing to be reduced should be made public.

- There is evidence that not all plants act as significant fire fuel. Dr Malcolm Gill, an eminent scientist from the Australian National Herbarium, states: "*While all plants may be said to produce fuel, only a small proportion contribute significantly to the fuel which carries the fires. Removal of the fuel contribution of most species will make no difference to fire spread*" [3,p1].
- So-called "fuel" is also habitat which should not be burned unnecessarily [11,12,13] Habitat should not be burned simply because some residents mistakenly believe that burning it will protect their homes.

Selection of burn sites should be made on the basis of on-site analysis of environmental factors. Many burn sites are not individually surveyed prior to selection for burning; instead are selected on the basis of a desktop analysis of an 'indicator' plot of the same EVC elsewhere, but there is evidence that these management 'shortcuts' are deeply flawed and of limited generic value [37] and may, therefore, violate accepted scientific principles for managing biodiversity, which include maintenance of structural complexity and maintenance of landscape heterogeneity [37]. In addition, it is recognized by experts that all fires require an awareness of local conditions [10].

*See the full FOGL submission to the IGEM on Planned Burns on the FOGL website: fogl.org.au

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