

Issues relating to the proposed burn in Cape Liptrap Coastal Park

Darcy Duggan

Principal Ecologist

Bushland Management Services

Dear Sir,

In early May 2014 I was invited by local residents to examine an area of remnant bushland within the Cape Liptrap Coastal park between Waratah Bay and Walkerville, to assess the likely ecological impacts of a proposed prescribed burn.

The vegetation within the proposed area comprises a mosaic of several Ecological Vegetation Classes [EVC's] reflecting variations in soils, slope and aspect. Of particular note is the mature age class and successional changes evident throughout the site due to the general absence of fire for some 85+ years. Coastal vegetation of this age class is now considered rare within the state [G.W.Carr pers com] and is effectively the last area left in South Gippsland, following the large scale fires within Wilson's Promontory National Park.

This area now provides an important reference against which other remnant patches with different fire regimes can be compared. This factor is significant from a scientific perspective in understanding ecological and successional processes within these EVC's and monitoring impacts of prescribed burning on flora and faunal values.

The overall condition of the vegetation is considered excellent with good variability in structure and mixed age class including mature [habitat] trees within the Forest and Woodland EVC's. Weeds were generally limited to road-sides and minor patches along path edges but otherwise low impact. The exception was a number of new emergent weeds [e.g Cape Ivy, Panic Veldt-grass] invading into the wet forest/rainforest slopes and gullies at the rear of the Walkerville Camping ground.

Areas of Damp Heathy Woodland and Wet Heathland located on the upper slopes are considered to be of particular significance due to:

1. Diverse structure and species diversity of heathland vegetation reflecting the various successional changes in the absence of fire. Evidence of senescent shrubs is very low.
2. High number and diversity of small birds and mammals including several threatened species notably the Emu Wren and Long-nosed Bandicoot.
3. The hydrological function these areas play in supporting extensive perched wetlands and springs within a saturated deep peat soil [major carbon store].

It is highly likely the hydrological role of these EVC's are essential to the protection of Damp/Wet/Rainforest remnants found along the lower slopes and drainage lines that feed into the coastal fringe.

A notable feature of areas of both Lowland and Damp Forest at the site was the locally dominant shrub Tasmanian Broom Heath [*Monotoca glauca*]. This species is listed as rare within the state and considered fire sensitive. It was clearly evident onsite that this species appears to suppress the growth of more

flammable species such as bracken and has very low ground litter loads. Little is known regarding its role in suppressing bracken and reduced accumulation of litter and requires further research.

The presence of Lyrebirds within the forest areas is also considered important as this species plays a vital role in reducing fuel loads through their foraging behaviour. This population is of particular significance as it is now isolated due to fragmentation and loss of corridor links to other communities.

There are a number of aspects of the proposed burn which would appear to be in conflict with one of the 2 key objectives for planned burns as stated within the Code of Practice for Bushfire Management on Public land. This states clearly that a key objective is to “To maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products”.

1. What pre flora and fauna assessment have been undertaken to identify existing biodiversity values?
2. Has a risk impact assessment been done for the threatened species present eg Tasmanian Broom Heath, Long-nosed Bandicoot?
3. DEPI documents indicate the key rationale underlying the proposed burn for the Wet Heathland to be based on a model to determine the various successional stages that should be present in an ideal EVC of this type. This model does not fit observed features onsite. How does this allow for successional changes beyond this EVC in the absence of fire which is clearly evident onsite?
4. What hydrological assessment has been done to determine the function of wet heathland in protecting stream flows and stabilizing the upper slopes?
5. What impact is the proposed burn likely to have on the underlying peaty soils and potential changes in hydrology and loss of carbon store?
6. I have been advised that an accelerant will be dropped from a helicopter onto the site to ignite the fire. What is the accelerant to be used and is there likely to be any toxic residue left onsite resulting from its use?
7. What followup control works are proposed to prevent rabbit damage and destruction of native vegetation recruitment [notably orchid and herbaceous species] as occurred post fire in Wilsons Promontory NP?
8. Similarly, will feral fox control works be undertaken to prevent predation of threatened species such as the Long-nosed Bandicoot?

On the basis of existing documentation, there would appear to be little justification for the proposed burn, especially given the many unanswered issues that should be dealt with in the pre planning stage in accordance with the various protocols and codes of practice.

It would be prudent therefore to defer any further burning of this area to allow a proper detailed assessment of the current vegetation and fauna values, to better understand the role of fire in long unburnt communities present onsite. The site is a perfect reference area to allow this process and has the potential to engage the broader community in these issues.

I await your reply regarding the various questions raised.

Darcy Duggan