

Planned burning: use of fuel-reduction burns for ecosystem maintenance

Background

Many of the ecosystems of the TWWHA are fire-dependent. This means they require fire at certain intervals in order to stay healthy and maintain their biodiversity.

Some examples of fire-dependent ecosystems that occur in the TWWHA include:

- > Buttongrass moorlands
- > Highland (montane) grasslands
- > Dry eucalypt forests

Buttongrass moorlands are highly flammable ecosystems, which are managed for both fuel reduction and as habitat for rare and threatened species, such as the critically endangered orange-bellied parrot. The orange-bellied parrot requires buttongrass around 7-10 years of age so requires regular burning around its breeding sites at Melaleuca in order to forage and feed its young. Other species dependent on buttongrass moorland are the emu wren, striated fieldwren, tawny-crowned honeyeater, broad-toothed rat and ground parrot.

Montane grasslands require regular burning to prevent them being invaded by woody species, such as trees and shrubs. There has been a reduction in the extent of montane grasslands in Tasmania since the cessation of regular burning in these environments. Frequent planned



Orange-bellied parrot



Ecological burn at Melaleuca for the orange-bellied parrot

burning for ecosystem maintenance is required in order to prevent the loss of any more montane grasslands. Fauna species such as the endangered ptunarra brown butterfly are dependent on grasslands such as those found in the TWWHA, and require a very specific fire regime. This would be best achieved through regular patchy burning, in order to achieve a range of tussock ages and prevent the encroachment of woody shrubs into the grassland.

Challenges

Through longer bushfire seasons, climate change is decreasing the windows of opportunity in which planned burning can occur.

A lot of uncertainty remains around the exact requirements needed for individual species.

Different species have competing requirements around burning frequency and season. Burning to favour one species may disadvantage others.

Ecological burning will result in changes to a community and we're not always sure exactly what these changes will be – although some sort of change is often the intent of the management action.

Doing nothing (i.e. no burning) is also a management decision, and usually also results in ecosystem change. However, doing nothing in vegetation communities dependent on fire will build up high levels of fuel that will support destructive bushfires.



The way forward

The Parks and Wildlife Service recognises its responsibility as a land manager to not only keep fuel levels low for safety reasons but to maintain healthy, functioning ecosystems. This means conducting burning in the TWWHA for the purpose of maintaining fire-dependent ecosystems. Some fire-dependent ecosystems, such as buttongrass moorland, are burnt as part of the fuel-reduction strategy, however montane grasslands do not fall into this category. For that reason, the Parks and Wildlife Service has developed a draft montane grasslands fire management strategy in order to help conserve these ecosystems.

The Parks and Wildlife Service will continue to research the appropriate fire regimes required for threatened species and vegetation communities within the TWWHA.

OTHER ISSUES SHEETS THAT MAY BE OF INTEREST

- 01 Tasmanian Wilderness World Heritage Area fire management objectives
- 02 Fuel-reduction burning
- 03 Planned burning: use of fuel-reduction burns for ecosystem maintenance
- 05 Aboriginal burning

