

The effects of fire frequency on the understorey of a Subalpine Snow Gum forest

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The effect of fire frequency on the understorey of an Australian Subalpine plant community has been investigated. Fire is relatively uncommon in alpine and subalpine regions of Australia and usually only occurs when severe weather conditions are coupled with severe drought. For this reason the impact of fire on flora in these regions is limited. The work that will be presented here is part of a long-term study assessing the effects of low intensity fire frequency on the understorey of approximately thirty, 20x20m plots located in the Namadgi National Park in the ACT. The Canberra bush fires of January 2003 provided a zero point such that the regeneration of all plots with previously different fire frequency treatments could be measured from a single point and hence accurately compared. The frequency of fire ranged from a burn approximately once every two years to once in a forty year period. It was found that there was no difference in species richness across the fire frequency treatments and only one of the fourteen species, *Daviesia mimosoides* was found to decline in density as fire frequency increased. It was also found that the ratio of the cover of grass to shrubs increased as fire frequency increased. Therefore it has been shown that, while not a large number of species in subalpine regions are affected, there may be a shift in species dominance, or perhaps the cover of herbs as opposed to shrubs as a result of the frequency of low intensity fires.

Translating science into practice - ecological bushland management