

Accessory publication

What factors influence rapid post-fire site re-occupancy? A case study of the endangered Eastern Bristlebird in eastern Australia

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Table A1. Covariates measured at (a) the transect level, (b) 20 × 20-m plot level, (c) 1 × 1-m subplot level, and (d) in 200- and 500-m polygons around each site (= landscape context variables)

Plot data were measured in two 20 × 20-m plots at each site. Ground cover assessment was measured in four 1 × 1-m subplots located within each 20 × 20-m plot. Landscape context variables were measured in polygons of 200- and 500-m radius around each field site

Variable	Description
<i>(a) Transect level</i>	
Fire severity	Score based on the severity of the fire in 2003: 0 = no fire, 1 = understorey burned; 2 = midstorey burned but not killed; 3 = midstorey killed; and 4 = midstorey killed and overstorey burned
Time since fire	Time (years) since the last fire at a site. Based on fire mapping and historical records held by Parks Australia
Wildfire frequency	Number of fires recorded at a site based on fire mapping and historical records held by Parks Australia
Elevation	Data extracted from detailed topographic maps
Vegetation type	Dominant vegetation type on a site. Based on mapped vegetation classes by Taws (1998).
<i>(b) Plot data</i>	
Number of layers	Number of vegetation layers. Layers were classified as follows: Overstorey, ≥10 m; Midstorey, 2–10 m; Understorey, ≤2 m
Number of dead shrubs	Number of dead shrubs per plot
Number of logs	Number of logs (>10-cm diameter and >1m long)
Percentage cover	Estimated percentage cover of midstorey and understorey plant species in each plot
Count of live stems	Count of live stems with each stem assigned to one of three diameter categories

Variable	Description
<i>(c)</i> Ground cover assessment	
Percentage cover	Percentage cover of rock, bare earth, leaf litter, bracken and grass regeneration (after 2003 wildfire), bitou bush, forbs, ferns.
<i>(d)</i> Landscape context variables	
Number of vegetation types	Number of vegetation types in a polygon of 200- and 500-m radius around each field site
Distance to similar vegetation type	The distance from the edge of a polygon containing a given field site to the nearest (but spatially discrete) patch of vegetation of the same vegetation type
Percentage of green cover within 200 and 500 m of site after fire	Percentage of unburned vegetation in a polygon of 200- and 500-m radius around of each field site
Distance to unburned vegetation	The straight line distance (m) from the centre of each field site to the nearest area of unburned vegetation
