Appendix. Summary of all environmental variables, codes, definition and collection methodology, utilised in the generalised linear modelling and other analyses

Degree of freedom for each variable = 1 unless indicated. (+) and (-) indicate the direction of the relationship, and % indicates total deviance explained for that variable examined individually. Probability levels are: *, P < 0.05; ***, P < 0.01; ***, P < 0.001

Variable Data collection method DEU survey LATDEC (-) 12%***, LONGDEC (-) 1%*** GPS data for quadrat location SEASON n.s. Wet (October-March) or dry (April-September) PERWATER (+) 12%***, EPHWATER (+) 1% *** Distance (km) to nearest perennial and ephemeral water sources FIRE (-) 1%***, CATTLE (-) 17%***, WEED (-) 8%***, Level of impact in each category (tree represents tree senescence) recorded on continuous TREE (-) 2% GCBARE (-) 4%***, GCROCK n.s., GCHUMM (+) 45%***, Percentage ground cover for categories bare, rock, hummock grass, tussock grass, sedges, GCTUSS (-) 21%***, GCSEDG (-) 5%***, GCFORB (-) forbs, litter, ferns, Cumulative total to equal 100% 11%***, GCLITT (-) 9%***, GCFERN n.s. LOG > 10 (-) 18%***, DEAD > 10 (-) 3%***, FALL > 10 (-) Total number of logs (along total quadrat perimeter), dead trees and fallen trees (within 13%*** quadrat) > 10cm diameter CRACK/M (-) 7%***, CRACMODE (-) 6%*** Average number of cracks/m along 50m quadrat edge and modal size (mm) TERMITE n.s., TERMMODE (+) 1%* Total number of termite mounds in quadrat and the modal height (m) CANHEIGH (-) 9%***, CANRICH n.s., CANCOVER (-) Average canopy height (m), number of canopy species and average canopy crown cover 10%*** (subjective assessment) in quadrat TOTBASE (-) 14%***, LIVEBASE (-) 10%***, DEADBASE Total basal area (m²/ha) averaged from 5 Bitterlich sweeps (one at each corner and one in centre of quadrat), and the live and dead component of the total GSHEIGHT (+) 1%***, GSRICH (-) 18%***, GSCOVER (+) Average ground stratum height (m), total number of species and total alive ground cover (%) for quadrat FPC > 10 (-) 13%***, FPC5-10 (-) 5%***, FPC3-5 (-) Foliage profile cover score (%) for height categories > 10m, 5-10m, 3-5m, 1-3m, 1-2%***, FPC1-3 (+) 2%***, FPC1/2-1 n.s., FPC < 1/2 (+) 0.5m. < 0.5m within quadrat. 16%*** NBB/SDEU survey SEASON n.s. Summer (October-March) or winter (May - August) SITETYPE 23%*** Eight site types chosen: as shown in Table 4. Eight replicate sites in each site type, except unconnected linear strips (5 replicates) and regrowth (7 replicates) LATDEC (-) 2%, LONGDEC n.s. GPS data at site location TIMECLEA (-) 2%*, FIREFREQ (-) 8%***, BUFFSEED (-) Average number of years since sites were isolated by tree clearing (remnants) or were cleared (pasture and regrowth, number of years between fires, deliberate sowing of Buffel grass (Cenchrus ciliaris) (yes/no) PADDAREA (+) 2%**, STOCK (+) 10%*** Area of paddocks containing sites, average stocking rate of paddock. ONEACAC n.s., ONECLEAR (+) 2%**, ONEEFW n.s. % area of major vegetation communities (ACAC = Acacia communities, EFW = Eucalypt forest and woodland); and cleared land (ONECLEAR) within 1km of each site FIVEACAC (-) 2%*, FIVECLEA (-) 2%**, FIVEEFW (+) % area of major vegetation communities and cleared land within 5km of each site (as TENACAC (-) 3%**, TENCLEAR (-) 8%***, TENEFW (+) % area of major vegetation communities and cleared land within 10km of each site (as 8%*** above) THIRACAC (-) 6%***, THIRCLEA (-) 1%**, THIREFW (+) % area of major vegetation communities and cleared land within 30km of each site (as 2%** above) LOG > 5 (+) 4% ***, TERM n.s., TERMHT n.s., HOLLTREE Density of habitat feature attributes; fallen logs > 5cm diameter, number and height of (-) 7%***, STAGTREE (-) 9%*** termite mounds, hollows in live and dead standing tees. Recorded as the number in each of 16 sub-quadrats, 25m by 4m, along each quadrat's long axes. HCABS n.s., HC0-2 (-) 4%**, HC2-5 n.s., HC5-10 (-) Average hits for ground stratum foliage profile cover (%) in eight cover categories from 7%***, HC10-20 (-) 3%***, HC20-50 n.s., HC50-70 (+) absent to > 70%, and height of ground cover, recorded from 20, 50 × 50cm frames 3%***, HC > 70 (+) 9%***, AVHTCOV (+) 21%*** located at 25m intervals around the perimeter of each quadrat. DEADSPP (-) 12%***, AVACSH n.s., AVACTR (-) 3%*, Density and basal area of canopy and mid storey tree species (and standing dead trees), BLOODS (-) 2%*, BLOODR (-) 4%**, AVPOP (-) 8%***, and dieback condition of these species from categories: 1 = healthy, 2 = major branches AVSLI (-) 1%*, AVTREE (-) 11%***, DIEBLS1 (-) 2%*, dead, 3 = tree nearly dead, 4 = tree dead with bark, 5 = tree dead without bark. Recorded DIEBLDR1 (-) 3%***, DIEPOP1 (-) 7%***, DIESLI1 (-) from six Bitterlich sweeps positioned around edge of quadrat. 2%*, BASAL (-) 17%*** SPPRICH n.s., PERALL (+) 2%**, ANNUAL (+) 2%**, Ground cover variables; species richness, perennial grasses, annual grasses, all grasses, all ANNPER (+) 2%**, ALLGRASS n.s., ALLNATIVE n.s., native species, tussock grasses and hummock grasses, from 50cm by 50cm frames NATTUSS n.s., HUMM (+) 10%*** placed 10m apart over 20 points.