ONLINE APPENDIX 1

TABLE 1: Details of model specifications for the MCMCglmm analyses of tree, grass and forb richness, structural responses of various tree species and cover of various grass species.

Species / Functional group	Vegetation	Response	Fixed	Random	Nitt	Burnin	Thin	Error distr	link	Slice	Prior
Tree, grass and forb richness											
Grasses	Mopane	SR	Zone * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Grasses	Mopane	SR	E.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Grasses	Mopane	SR	H.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Mopane	SR	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Mopane	SR	E.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=4, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Mopane	SR	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Poisson (“poisson”)	Log	True	IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Mopane	SR	Zone * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Mopane	SR	E.Dung * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Mopane	SR	H.Dung * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 00
Grasses	Sandveld	SR	Zone * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Grasses	Sandveld	SR	E.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Grasses	Sandveld	SR	H.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Sandveld	SR	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Sandveld	SR	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=8, nu=0.002, alpha.mu=0, alpha.V=1 000)
Forbs	Sandveld	SR	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Sandveld	SR	Zone * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=4, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Sandveld	SR	E.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002)

											G-structure: Pr(σ2) ~ IW(V=4, nu=0.002, alpha.mu=0, alpha.V=1 000)
Trees	Sandveld	SR	H.Dung * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Poisson (“poisson”)	Log	True	R-structure: Pr(σ2) ~ IW(V=3, nu=0.002) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Structural responses of tree species											
C. mopane	Mopane	Count	Zone * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	5e+05	1e+05	100	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
C. mopane	Mopane	Count	E.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	5e+05	1e+05	100	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
C. mopane	Mopane	Count	H.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	5e+05	1e+05	100	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. nelsii	Sandveld	Count	Zone * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	1e+06	2e+05	200	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. nelsii	Sandveld	Count	E.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	5e+05	1e+05	100	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. nelsii	Sandveld	Count	H.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	5e+05	1e+05	100	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
T. sericea	Sandveld	Count	Zone * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	1e+06	2e+05	200	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
T. sericea	Sandveld	Count	E.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	1e+06	2e+05	200	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
T. sericea	Sandveld	Count	H.Dung * HC * Fire.freq	LT:Zone:ST + LT:Zone:ST:S_Point	1e+06	2e+05	200	Binary (“categorical”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
Cover of grass species											
A. adscensionis	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=1, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
A. adscensionis	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=1, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
A. adscensionis	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=1, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
A. scabrivalvis	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	4e+06	8e+05	800	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
A. scabrivalvis	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	4e+06	8e+05	800	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
A. scabrivalvis	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	3e+06	6e+05	600	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
A. stipitata	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
A. stipitata	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
A. stipitata	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
D. giganteum	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
D. giganteum	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)

D. giganteum	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
D. eriantha	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=1, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
D. eriantha	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=1, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
D. eriantha	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
D. milanjiana	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	2e+07	4e+06	4 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
D. milanjiana	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	2e+07	4e+06	4 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
D. milanjiana	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	2e+07	4e+06	4 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
E. regidior	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
E. regidior	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1000)
E. regidior	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1000)
E. trichophora	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	1.5e+06	3e+05	300	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
E. trichophora	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	1e+07	2e+06	2 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
E. trichophora	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	2.5e+06	5e+05	500	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
P. maximum	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+06	1e+06	1 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1000)
P. maximum	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	4e+06	8e+05	800	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1000)
P. maximum	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	3e+06	6e+05	600	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1000)
P. maximum	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
P. maximum	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
P. maximum	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
P. fleckii	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	3e+06	6e+05	600	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. fleckii	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	2.5e+06	5e+05	500	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. fleckii	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	2.5e+06	5e+05	500	Binomial (“multinomial2”)	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
P. fleckii	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	4e+07	8e+06	8 000	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
P. fleckii	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	4.5e+06	9e+05	900	Binomial (“multinomial2”)	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)

P. fleckii	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	4e+06	8e+05	800	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
S. pappophoroides	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	2e+06	4e+05	400	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
S. pappophoroides	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	3.5e+06	7e+05	700	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
S. pappophoroides	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	6.5e+06	1.3e+06	1 300	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002)
U. trichopus	Mopane	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial ("multinomial2")	logit	True	R-structure: Pr(σ2) ~ IW(V=5, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
U. trichopus	Mopane	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial ("multinomial2")	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
U. trichopus	Mopane	% Cover	H.Dung * Fire.freq	LT:Zone:ST	3e+06	6e+05	600	Binomial ("multinomial2")	logit	True	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
U. trichopus	Sandveld	% Cover	Zone * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
U. trichopus	Sandveld	% Cover	E.Dung * Fire.freq	LT:Zone:ST	5e+05	1e+05	100	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)
U. trichopus	Sandveld	% Cover	H.Dung * Fire.freq	LT:Zone:ST	1e+06	2e+05	200	Binomial ("multinomial2")	logit	False	R-structure: Pr(σ2) ~ IW(V=10, fix=1) G-structure: Pr(σ2) ~ IW(V=1, nu=0.002, alpha.mu=0, alpha.V=1 000)

SR, species richness; LT, large transact; ST, small transact; E.Dung, elephant dung; H.Dung, herbivore dung; HC, height class.

TABLE 2: Markov chain Monte Carlo analyses (Hadfield 2010) of the relationship between the height structure of the three most dominant tree species of the study area and distance zone from permanent water. Posterior means, 95% confidence intervals and *p*-values (< 0.05 in bold).

Variable	***C. mopane***				***P. nelsii***				***T. sericea***			
	Posterior mean	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**	**Posterior mean**	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**	**Posterior mean**	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**
Zone*HC*Fire												
(Intercept)	2.2261	0.6188	3.7880	0.0055	-2.3645	-3.8625	-0.8248	0.0030	-6.9271	-9.0419	-4.9130	<3e-04
Zone10-15	-0.2987	-2.7778	2.3486	0.8155	1.7377	-0.5605	4.3339	0.1680	4.3126	1.6243	7.3326	**0.0040**
Zone>20	-1.2569	-3.6937	1.1789	0.3165	1.9999	-0.5030	4.3027	0.1070	4.3369	1.5232	7.2139	**0.0020**
HC2	1.6663	0.4502	2.8111	**0.0045**	1.6400	0.4933	2.7082	**0.0010**	1.6535	-0.2349	3.4264	0.0805
HC3	2.8449	1.5395	4.1123	**<3e-04**	1.4839	0.3087	2.5929	**0.0110**	0.8191	-1.1809	2.6525	0.3955
HC4	2.8837	1.6316	4.2018	**<3e-04**	0.4340	-0.7042	1.5210	0.4630	-4.3282	-8.3248	-0.5237	**0.0240**
Fire	-0.1375	-1.2325	1.0328	0.8055	0.2541	-0.7602	1.2726	0.6320	1.6796	0.3398	2.9725	**0.0085**
Zone10-15:HC2	1.1021	-0.6671	3.0582	0.2560	0.4766	-1.4053	2.2412	0.6060	-1.0550	-3.4001	1.2315	0.3930
Zone>20:HC2	1.2989	-0.5596	3.2587	0.1860	0.1343	-1.6104	1.7836	0.8800	-1.4818	-3.9068	0.8014	0.2315
Zone10-15:HC3	0.1912	-1.6705	2.2099	0.8495	-0.9133	-2.6077	0.9614	0.3200	0.9574	-1.4824	3.3960	0.4325
Zone>20:HC3	0.9493	-0.8621	2.9910	0.3530	-0.3780	-2.0112	1.4195	0.6655	-0.4371	-2.6120	2.1597	0.7180
Zone10-15:HC4	0.7111	-1.1900	2.6510	0.4565	-2.3549	-4.1997	-0.4743	**0.0190**	6.4833	2.4045	10.7451	**0.0020**
Zone>20:HC4	2.7973	0.6640	4.8759	**0.0080**	-4.1166	-6.0733	-2.3462	**<3e-04**	6.3842	2.1755	10.3866	**0.0015**
Zone10-15:Fire	-0.3713	-2.1868	1.1925	0.6685	-0.3844	-1.9563	1.0254	0.6155	-1.2542	-2.9529	0.4893	0.1575
Zone>20:Fire	0.5887	-0.9456	2.0489	0.4610	0.0493	-1.3020	1.4034	0.9405	-2.0950	-3.7126	-0.4946	**0.0095**
HC2:Fire	0.9772	0.0955	1.7873	**0.0230**	-0.0210	-0.8233	0.7183	0.9600	0.0640	-1.0716	1.2005	0.9250
HC3:Fire	1.0827	0.1685	2.1191	**0.0280**	0.0356	-0.7477	0.8605	0.9295	-0.8503	-2.0970	0.3619	0.1735
HC4:Fire	2.4262	1.0732	3.8303	**<3e-04**	-0.9277	-1.7606	-0.2088	**0.0130**	-1.0718	-3.8899	1.7722	0.4590
Zone10-15:HC2:Fire	-0.8881	-2.0865	0.3871	0.1620	-0.6758	-1.8390	0.4273	0.2405	0.1544	-1.2753	1.4913	0.8340
Zone>20:HC2:Fire	-0.6054	-1.7509	0.7152	0.3235	-0.4147	-1.4181	0.5389	0.4070	0.2364	-1.2424	1.4206	0.7085
Zone10-15:HC3:Fire	-1.5039	-2.8516	-0.2583	**0.0250**	-0.7837	-1.8899	0.3806	0.1750	1.0896	-0.3956	2.4768	0.1460
Zone>20:HC3:Fire	-1.6457	-2.8374	-0.3509	**0.0095**	-0.9915	-1.9832	0.0584	0.0575	1.9708	0.5717	3.4113	**0.0075**
Zone10-15:HC4:Fire	-3.6659	-5.3523	-2.1308	**<3e-04**	-0.4369	-1.7510	0.7822	0.5060	1.0954	-1.7890	4.0967	0.4725
Zone>20:HC4:Fire	-3.6798	-5.2591	-2.0740	**<3e-04**	0.4652	-0.5454	1.5203	0.3965	2.4032	-0.3377	5.5212	0.0910
E.Dung*HC*Fire												
(Intercept)	1.6128	0.3157	2.8483	0.0145	-0.7338	-2.0728	0.5588	0.2625	-3.8788	-5.5479	-2.0735	<3e-04
E.Dung	0.0049	-0.0660	0.0717	0.8795	-0.0520	-0.1152	0.0067	0.0880	-0.0302	-0.1084	0.0514	0.4640
HC2	2.8250	1.8404	3.8460	**<3e-04**	1.7703	0.7409	2.6642	**<3e-04**	-0.6947	-1.8693	0.4948	0.2590

HC3	2.7622	1.7279	3.8821	**<3e-04**	0.8023	-0.1955	1.7328	0.1080	-0.3764	-1.5281	0.8207	0.5415
HC4	4.5958	3.6213	5.6806	**<3e-04**	-1.5273	-2.5424	-0.5210	**0.0035**	1.4563	0.1818	2.7211	**0.0240**
Fire	0.3830	-0.4100	1.2080	0.3535	0.3157	-0.3850	1.1090	0.4050	0.8492	-0.1866	1.7544	0.0785
E.Dung:HC2	-0.0355	-0.0873	0.0108	0.1635	0.0066	-0.0365	0.0556	0.7695	0.1042	0.0442	0.1621	**0.0015**
E.Dung:HC3	0.0582	-0.0094	0.1400	0.1075	0.0363	-0.0120	0.0839	0.1405	0.0708	0.0112	0.1287	**0.0210**
E.Dung:HC4	-0.0570	-0.1079	-0.0076	**0.0295**	0.0321	-0.0132	0.0816	0.1845	-0.1020	-0.1771	-0.0253	**0.0065**
E.Dung:Fire	-0.0551	-0.1090	0.0032	0.0550	0.0068	-0.0256	0.0406	0.6930	-0.0177	-0.0635	0.0293	0.4595
HC2:Fire	0.0028	-0.6019	0.6648	0.9925	-0.6830	-1.2297	-0.1132	**0.0155**	0.4593	-0.1979	1.1340	0.1865
HC3:Fire	-0.4934	-1.1236	0.1647	0.1315	-1.1757	-1.7463	-0.6205	**0.0005**	0.8330	0.1613	1.4999	**0.0100**
HC4:Fire	-1.5513	-2.1669	-0.9247	**<3e-04**	-2.0021	-2.6187	-1.3785	**<3e-04**	0.7443	0.0548	1.4714	**0.0445**
E.Dung:HC2:Fire	0.0547	0.0119	0.0962	**0.0090**	0.0156	-0.0100	0.0413	0.2375	-0.0204	-0.0554	0.0171	0.2645
E.Dung:HC3:Fire	0.0539	-0.0009	0.1040	**0.0445**	0.0219	-0.0061	0.0492	0.1250	-0.0141	-0.0487	0.0241	0.4400
E.Dung:HC4:Fire	0.1260	0.0749	0.1730	**<3e-04**	0.0414	0.0138	0.0670	**0.0030**	0.0208	-0.0240	0.0633	0.3500
H.Dung*HC*Fire												
(Intercept)	1.5377	0.4324	2.7127	0.0095	-1.1936	-2.2524	-0.1247	0.0285	-3.8049	-5.1699	-2.4620	<3e-04
H.Dung	0.2048	-0.2721	0.7361	0.4105	0.0373	-0.2906	0.3801	0.8240	-0.4226	-0.8830	0.0816	0.0735
HC2	2.6708	1.8442	3.6278	**<3e-04**	1.4553	0.6333	2.2345	**0.0005**	1.0884	0.1870	2.0704	**0.0260**
HC3	2.9818	2.0997	3.8484	**<3e-04**	0.5644	-0.2604	1.3722	0.1690	1.5015	0.5075	2.4635	**0.0010**
HC4	4.1615	3.3063	5.1903	**<3e-04**	-2.1422	-3.0891	-1.3035	**<3e-04**	1.8439	0.8954	2.8593	**0.0005**
Fire	0.0463	-0.6289	0.7542	0.9060	0.3838	-0.1475	0.9745	0.1755	0.3071	-0.3634	1.0247	0.3940
H.Dung:HC2	-0.3347	-0.7021	0.0176	0.0635	0.1281	-0.1261	0.3846	0.3220	-0.9479	-1.6166	-0.3185	**0.0025**
H.Dung:HC3	0.1057	-0.3130	0.4801	0.5995	0.4149	0.1442	0.6960	**0.0020**	-0.8425	-1.6937	-0.0337	**0.0250**
H.Dung:HC4	-0.3692	-0.7182	-0.0204	**0.0405**	0.5809	0.3106	0.8366	**<3e-04**	-0.5327	-1.4267	0.1824	0.1455
H.Dung:Fire	-0.1066	-0.4071	0.1685	0.4615	-0.3269	-0.6636	0.0063	0.0500	0.4452	0.0011	0.8542	**0.0335**
HC2:Fire	0.3770	-0.1907	0.8891	0.1905	-0.3209	-0.7385	0.1006	0.1430	-0.0171	-0.5169	0.4411	0.9305
HC3:Fire	0.1054	-0.4286	0.6207	0.7060	-0.5573	-0.9755	-0.1082	**0.0085**	0.4232	-0.0829	0.9151	0.0965
HC4:Fire	-0.6084	-1.1344	-0.0570	**0.0230**	-0.8229	-1.2911	-0.3239	**0.0010**	0.6197	0.1243	1.0766	**0.0100**
H.Dung:HC2:Fire	0.1292	-0.0809	0.3624	0.2485	0.1084	-0.1418	0.3726	0.4075	0.7611	0.2388	1.2343	**0.0015**
H.Dung:HC3:Fire	-0.1809	-0.3965	0.0180	0.0850	-0.1030	-0.3640	0.1850	0.4645	0.0147	-0.4877	0.5896	0.9995
H.Dung:HC4:Fire	0.0713	-0.1194	0.2747	0.4935	-0.3416	-0.6694	-0.0464	**0.0295**	-1.3484	-2.1390	-0.4904	**0.0065**

TABLE 3: Grass cover responses. Posterior means, 95% confidence intervals and *p*-values (< 0.05 in bold).

Variable	**Mopane**											
	Posterior mean	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**	**Posterior mean**	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**	**Posterior mean**	**Lower 95% CI**	**Upper 95% CI**	**pMCMC**
Zone*Fire	***A. adscensionis***				***A. scabrivalvis***				***D. eriantha***			
Intercept	-2.2495	-3.1333	-1.2788	<3e-04	-7.9453	-11.8276	-4.6602	<3e-04	-14.0855	-18.4713	-9.8206	<3e-04
Zone10-15	0.7943	-0.7819	2.2699	0.2900	-7.8936	-14.0543	-1.8578	**0.0080**	2.5623	-2.9565	9.0365	0.3650
Zone>20	0.3081	-1.2021	1.6975	0.6760	-12.7283	-21.0149	-5.0382	**0.0005**	0.9668	-6.4795	7.6192	0.7590
Fire	-0.0704	-0.6978	0.5851	0.8180	-0.6838	-3.5139	2.1231	0.6435	2.4730	0.2796	4.8049	**0.0310**
Zone10-15:Fire	-0.2625	-1.2654	0.7085	0.6020	5.6909	1.6800	9.7595	**0.0020**	-3.8900	-8.3730	-0.1132	**0.0420**
Zone>20:Fire	-0.1045	-0.9803	0.8334	0.8070	4.5764	0.3134	8.6796	**0.0205**	-5.0571	-10.9188	-0.3292	**0.0265**
E.Dung*Fire												
Intercept	-1.4010	-2.1331	-0.7436	<3e-04	-14.5772	-19.0835	-10.5336	<3e-04	-13.5594	-17.4326	-10.0884	<3e-04
E.Dung	-0.0513	-0.0907	-0.0129	**0.0100**	0.1236	-0.0546	0.3026	0.1610	0.0221	-0.1428	0.1765	0.7500
Fire	-0.3452	-0.8076	0.0808	0.1340	2.8234	0.7040	5.1027	**0.0090**	-0.5922	-2.8295	1.3718	0.5670
E.Dung:Fire	0.0139	-0.0181	0.0432	0.3720	-0.0787	-0.2342	0.0747	0.3040	0.0913	-0.0255	0.2134	0.0955
H.Dung*Fire												
Intercept	-1.6484	-2.2972	-1.0314	<3e-04	-13.5936	-17.4143	-9.8709	<3e-04	-13.5234	-17.6202	-10.1362	<3e-04
H.Dung	-0.3058	-0.6009	-0.0420	**0.0340**	0.4058	-1.1240	1.7995	0.5620	0.0196	-0.1422	0.1809	0.8000
Fire	-0.2780	-0.6577	0.1145	0.1720	2.5129	0.7720	4.5960	**0.0080**	-0.6187	-2.8488	1.4992	0.5710
H.Dung:Fire	0.1154	-0.0441	0.2734	0.1690	-0.5831	-1.5272	0.3774	0.2100	0.0926	-0.0247	0.2194	0.1060
Zone*Fire	***D. milanjiana***				***E. rigidior***				***E. trichophora***			
Intercept	-14.8643	-20.2616	-10.2549	<3e-04	-10.5918	-13.5246	-8.0621	<3e-04	-10.0717	-13.1800	-6.7432	<3e-04
Zone10-15	2.4763	-4.1289	8.8368	0.4420	2.1083	-1.6202	5.5065	0.2550	2.0252	-2.7220	6.7271	0.3830
Zone>20	-1.9380	-8.8771	5.2896	0.5720	2.7679	-0.8629	6.9406	0.1550	2.0810	-2.6297	6.5574	0.3650
Fire	2.0686	-0.7479	5.1486	0.1470	-1.5518	-3.8343	0.8542	0.1730	0.4837	-1.5980	2.4814	0.6110
Zone10-15:Fire	0.2652	-3.6656	4.3406	0.8890	1.8765	-1.0834	4.6083	0.1720	-1.6067	-4.8226	1.4910	0.3240
Zone>20:Fire	1.0103	-2.6859	4.9734	0.5670	0.4349	-2.5268	3.1903	0.7680	-1.0587	-4.0242	1.6408	0.4540
E.Dung*Fire												
Intercept	-15.3748	-19.6275	-11.2757	<3e-04	-7.8762	-10.1533	-5.8136	<3e-04	-5.1251	-8.2206	-2.2969	0.0015
E.Dung	0.0883	-0.1010	0.2641	0.3185	-0.1579	-0.3559	0.0218	0.0570	-0.5610	-1.0070	-0.1150	**0.0005**
Fire	2.9646	1.0489	5.0315	**0.0025**	-0.6335	-1.9472	0.7431	0.3390	-1.2246	-2.8583	0.4888	0.1415
E.Dung:Fire	-0.0496	-0.1799	0.0965	0.4615	0.0179	-0.1123	0.1499	0.7760	0.1234	-0.1019	0.3422	0.2440
H.Dung*Fire												
Intercept	-13.9660	-17.5926	-10.7229	<3e-04	-8.3471	-10.0029	-6.5910	<3e-04	-7.7398	-10.0298	-5.6740	<3e-04
H.Dung	-0.5138	-2.2062	1.0193	0.5620	-1.2515	-2.6193	-0.0644	**0.0320**	-1.5979	-3.1668	-0.0784	**0.0145**

Fire	2.2956	0.6840	3.9914	**0.0040**	-0.6577	-1.7647	0.3636	0.2150	-0.7880	-2.1500	0.4311	0.2080
H.Dung:Fire	0.1729	-0.5507	0.9435	0.6680	0.4343	-0.1154	1.0809	0.1430	0.6392	0.0154	1.3084	**0.0320**
<u>Zone*Fire</u>	***P. maximum***				***P. fleckii***				***S. pappophoroides***			
Intercept	-13.2009	-17.1915	-9.5541	<3e-04	-6.0431	-9.3995	-2.9224	0.0010	-9.8311	-12.7037	-7.3093	<3e-04
Zone10-15	4.4494	-1.3549	9.7997	0.1000	-8.4336	-14.8958	-2.7709	**0.0010**	-2.2544	-6.3671	1.5837	0.2645
Zone>20	5.8021	0.0475	11.3102	**0.0240**	-7.4684	-13.9878	-2.0279	**0.0090**	-2.9677	-7.2516	1.6106	0.1710
Fire	0.0760	-2.1765	2.6436	0.9440	-2.4230	-5.1395	0.3317	0.0625	-2.6418	-5.3427	0.0453	**0.0385**
Zone10-15:Fire	-2.3160	-6.0116	1.8654	0.2260	5.3043	1.4511	9.3541	**0.0020**	4.9687	1.8521	8.3084	**0.0025**
Zone>20:Fire	-3.6173	-8.0792	0.2547	0.0570	2.5550	-1.1657	6.2261	0.1650	3.8106	0.6543	7.0606	**0.0160**
<u>**E.Dung*Fire**</u>												
Intercept	-9.1397	-11.9333	-6.4044	<3e-04	-12.2791	-15.4897	-9.3083	<3e-04	-10.6052	-13.5410	-7.7638	<3e-04
E.Dung	-0.0595	-0.2113	0.0941	0.4410	0.1983	0.0723	0.3385	**0.0040**	-0.1808	-0.4746	0.0620	0.1370
Fire	-2.8561	-5.2515	-0.7037	**0.0030**	0.5898	-1.1914	2.2634	0.4960	0.4969	-1.1453	1.9655	0.5250
E.Dung:Fire	0.1247	0.0059	0.2456	**0.0245**	-0.0553	-0.1728	0.0730	0.3640	0.0442	-0.1043	0.1967	0.5480
H.Dung*Fire												
Intercept	-10.5890	-13.1505	-8.3554	<3e-04	-10.5416	-13.6908	-7.7217	<3e-04	-10.0309	-12.3713	-7.7770	<3e-04
H.Dung	0.5603	-0.3102	1.5304	0.2040	0.3550	-0.8249	1.3727	0.5020	-3.0292	-5.6450	-0.5597	**0.0010**
Fire	-1.2159	-2.8746	0.2714	0.1030	-0.2568	-1.9613	1.3330	0.7760	-0.0175	-1.2538	1.1590	0.9720
H.Dung:Fire	-0.1879	-0.9376	0.5189	0.6250	-0.0519	-0.6576	0.5670	0.8590	1.2346	0.4063	2.2521	**0.0010**
<u>**Zone*Fire**</u>	***U. trichopus***											
Intercept	-3.7337	-5.4400	-1.8544	<3e-04								
Zone10-15	-4.0511	-7.5355	-0.9071	**0.0160**								
Zone>20	-1.6514	-4.7107	1.3425	0.2730								
Fire	-0.0267	-1.2280	1.2527	0.9630								
Zone10-15:Fire	0.0655	-2.1261	2.2608	0.9480								
Zone>20:Fire	-1.9772	-4.0029	-0.0344	**0.0410**								
<u>**E.Dung*Fire**</u>												
Intercept	-6.6550	-8.7502	-4.8133	<3e-04								
E.Dung	0.0843	-0.0255	0.1752	0.0980								
Fire	-1.1056	-2.4396	0.1831	0.0975								
E.Dung:Fire	0.0110	-0.0756	0.0935	0.8025								
H.Dung*Fire												
Intercept	-6.2146	-8.0786	-4.2422	<3e-04								
H.Dung	0.6159	-0.4033	1.5977	0.2210								
Fire	-0.7550	-1.9705	0.4265	0.2115								
H.Dung:Fire	-0.8601	-1.8336	0.0395	**0.0435**								

Variable	Posterior mean	Lower 95% CI	Upper 95% CI	pMCMC	Posterior mean	Lower 95% CI	Upper 95% CI	pMCMC	Posterior mean	Lower 95% CI	Upper 95% CI	pMCMC
Zone*Fire		*A. stipitata*				*D. giganteum*				*D. eriantha*		
Intercept	-4.1381	-5.5825	-2.6402	<3e-04	-6.7219	-8.4304	-5.0169	<3e-04	-4.4661	-5.6751	-3.3919	<3e-04
Zone10-15	-0.6306	-2.8924	1.8165	0.5960	-0.2411	-3.0965	2.7185	0.8650	2.0178	0.2897	3.7939	**0.0295**
Zone>20	0.2058	-2.0933	2.6083	0.8750	0.2758	-2.7765	3.0449	0.8630	2.2788	0.6079	4.1001	**0.0105**
Fire	-0.2751	-1.3500	0.6761	0.5930	0.6599	-0.5506	1.7731	0.2540	0.4680	-0.3760	1.1381	0.2155
Zone10-15:Fire	-0.0126	-1.4350	1.5226	0.9890	-0.9117	-2.7401	0.8225	0.2900	-0.3516	-1.4437	0.6857	0.5280
Zone>20:Fire	-0.0763	-1.4593	1.1646	0.9270	-1.2796	-2.8529	0.4225	0.1260	-0.3443	-1.3779	0.5671	0.4835
E.Dung*Fire												
Intercept	-5.3810	-6.6040	-4.1750	<3e-04	-5.4112	-6.9372	-3.9022	<3e-04	-2.8870	-4.0197	-1.9737	<3e-04
E.Dung	0.0737	0.0204	0.1248	**0.0060**	-0.0881	-0.1701	-0.0150	**0.0235**	-0.0310	-0.0772	0.0136	0.1740
Fire	0.1865	-0.5187	0.8741	0.5910	-0.5507	-1.4267	0.3155	0.2090	0.2027	-0.3548	0.7856	0.4720
E.Dung:Fire	-0.0315	-0.0615	-0.0001	**0.0465**	0.0272	-0.0120	0.0669	0.1715	0.0141	-0.0126	0.0384	0.2660
H.Dung*Fire												
Intercept	-4.2159	-5.2390	-3.1173	<3e-04	-6.6469	-7.9602	-5.3397	<3e-04	-3.2170	-4.2235	-2.3199	<3e-04
H.Dung	-0.0729	-0.3755	0.2712	0.6640	-0.0836	-0.4620	0.3336	0.6660	-0.2965	-0.6129	0.0076	0.0580
Fire	-0.3519	-0.9187	0.1904	0.2180	-0.2634	-1.0265	0.3773	0.4580	0.3195	-0.1694	0.7938	0.1920
H.Dung:Fire	0.1021	-0.1968	0.4316	0.5260	0.2322	-0.1391	0.6286	0.2170	-0.2512	-0.5742	0.0596	0.1080
Zone*Fire		*P. maximum*				*P. fleckii*				*U. trichopus*		
Intercept	-5.7109	-7.2744	-4.0305	<3e-04	-7.7248	-11.5692	-4.3007	<3e-04	-5.6186	-7.5103	-3.7116	<3e-04
Zone10-15	0.5020	-2.0881	3.0204	0.6980	-6.9181	-13.4356	-0.6228	**0.0345**	-6.8563	-11.0277	-3.1566	**0.0005**
Zone>20	-0.5565	-3.1648	1.9188	0.6780	-26.0980	-47.6301	-8.3913	**<3e-04**	-4.4625	-7.8675	-0.9302	**0.0120**
Fire	-0.7788	-1.8750	0.3217	0.1650	-0.0493	-2.5187	2.5145	0.9640	0.0547	-1.1093	1.4024	0.9145
Zone10-15:Fire	0.4027	-1.1687	1.9240	0.6320	2.5277	-1.0557	6.2993	0.1690	0.7399	-1.5247	2.8856	0.4945
Zone>20:Fire	0.9869	-0.5080	2.3635	0.1750	8.1039	1.9109	15.9737	**0.0030**	0.5598	-1.2669	2.3344	0.5420
E.Dung*Fire												
Intercept	-5.4566	-6.8494	-4.1148	<3e-04	-16.7738	-21.2877	-12.3487	<3e-04	-8.2088	-10.5263	-5.8726	<3e-04
E.Dung	-0.0257	-0.0848	0.0387	0.4250	0.2602	0.1227	0.4161	**<3e-04**	-0.0223	-0.1235	0.0843	0.6880
Fire	-0.2915	-1.0369	0.5077	0.4470	2.8769	0.7912	4.9850	**0.0030**	-0.0743	-1.3179	1.2483	0.9050
E.Dung:Fire	0.0098	-0.0246	0.0437	0.5650	-0.0917	-0.1811	-0.0061	**0.0260**	0.0025	-0.0530	0.0596	0.9230
H.Dung*Fire												
Intercept	-5.7928	-6.9762	-4.7000	<3e-04	-14.0380	-18.0332	-10.6266	<3e-04	-9.4468	-11.5411	-7.5469	<3e-04
H.Dung	0.2034	-0.1493	0.5065	0.2340	0.5481	-0.2977	1.3843	0.1830	0.5256	0.0232	1.0411	**0.0345**
Fire	-0.0423	-0.6272	0.5272	0.8920	1.7031	0.1483	3.3312	**0.0300**	0.2900	-0.6552	1.2709	0.5495
H.Dung:Fire	-0.4651	-0.8347	-0.1110	**0.0080**	0.3895	-0.3738	1.1382	0.3210	-0.0652	-0.5633	0.4003	0.7775

Note: This is Online Appendix 1 of Sianga, K., Van Telgen, M., Vrooman, J., Fynn, R.W.S. & Van Langevelde, F., 2017, 'Spatial refuges buffer landscapes against homogenisation and degradation by large herbivore populations and facilitate vegetation heterogeneity', *Koedoe* 59(2), a1434. https://doi.org/10.4102/koedoe.v59i2.1434