

Supplementary Material

Response of a shrubland mammal and reptile community to a history of landscape-scale wildfire

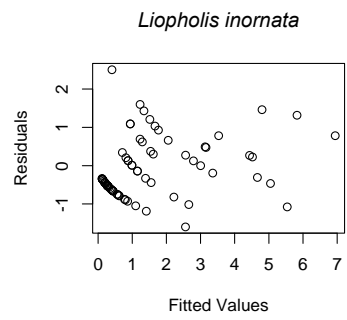
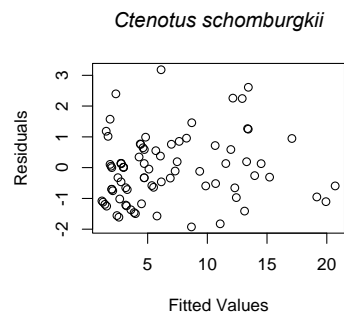
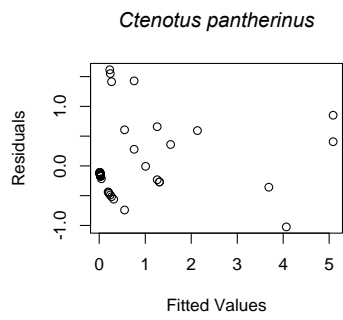
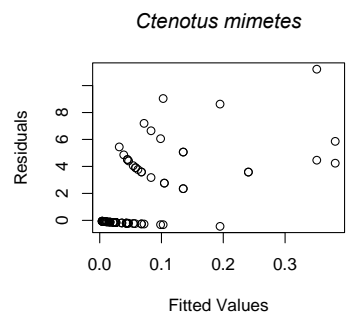
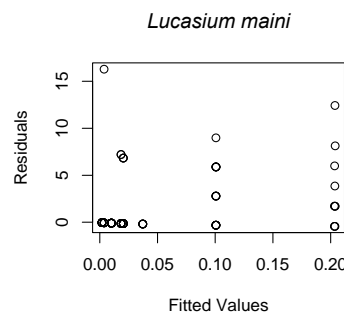
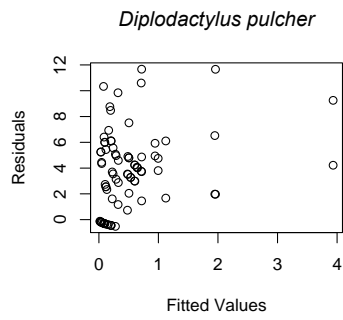
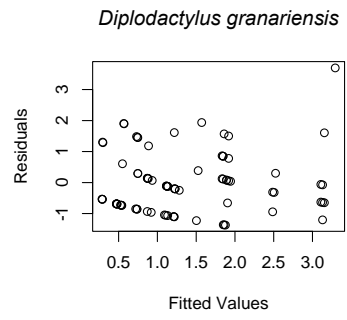
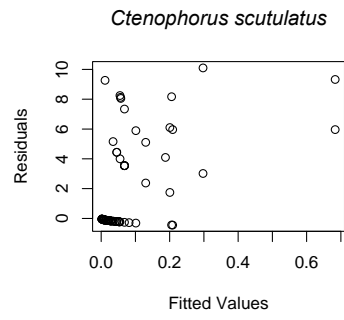
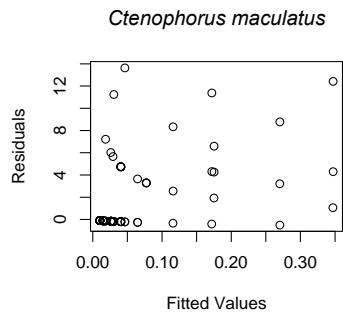
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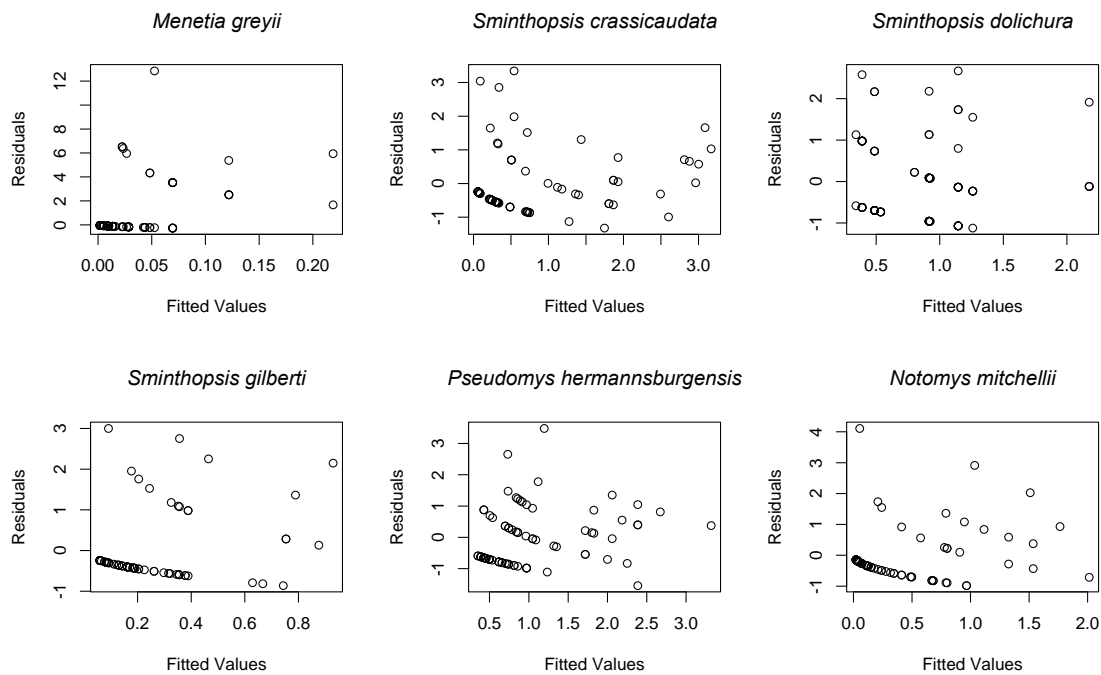


Fig. S1. Plots of residual and fitted values for linear mixed models to test the effect of vegetation fire age on fauna species abundance. The error distribution used in each model is listed in Table 2 in the main document.

Table S2. List of reptile and mammal species captured during monitoring at Charles Darwin Reserve, Western Australia in 2010–2013

Skins	Dragons
<i>Ctenotus mimetes</i>	<i>Ctenophorus maculatus</i>
<i>Ctenotus pantherinus</i>	<i>Ctenophorus reticulatus</i>
<i>Ctenotus schomburgkii</i>	<i>Ctenophorus scutulatus</i>
<i>Ctenotus severus</i>	<i>Moloch horridus</i>
<i>Egernia depressa</i>	<i>Pogona minor</i>
<i>Liopholis inornata</i>	Snakes
<i>Lerista muelleri</i>	<i>Brachyuropsis semifasciata</i>

Menetia greyii

Neelaps bimaculatus

Morethia obscura

Parasuta monachus

Tiliqua occipitalis

Pseudonaja modesta

Pseudonaja nuchalis

Geckoes

Ramphotyphlops hamatus

Diplodactylus granariensis

Monitors

Diplodactylus pulcher

Varanus gouldii

Lucasium maini

Varanus panoptes

Gehyra variegata

Rodents

Heteronotia binoei

Mus musculus

Rhyncodeura ornata

Notomys mitchellii

Strophurus michaelsoni

Pseudomys hermannsburgensis

Strophurus strophurus

Dasyurid marsupials

Legless lizards

Sminthopsis crassicaudata

Delma butleri

Sminthopsis dolichura

Lialis burtonis

Sminthopsis gilberti

Pygopus nigriceps

Sminthopsis granulipes

Table S3. Mixed model rankings (ΔAIC_c) and weights for relationships between fauna species abundance and microhabitat variables

Models with a $\Delta AIC_c < 2$ and a weight > 0.2 were explored further and are indicated here with bold text and grey shading.

Fauna species	Null model	Touches at 0–25 cm	Touches at 50–100 cm	Touches at 100–200 cm	% bare ground	Patch size	Number of pieces of woody debris
<i>Ctenophorus maculatus</i>	ΔAIC_c : 7.82	9.17	1.58	1.87	0.00	2.35	10.07
	Weight: 0.009	0.005	0.207	0.179	0.456	0.141	0.003
<i>Ctenophorus scutulatus</i>	ΔAIC_c : 13.85	0.00	4.02	6.35	15.20	15.95	4.76
	Weight: 0.001	0.787	0.106	0.033	0.000	0.000	0.073
<i>Diplodactylus granariensis</i>	ΔAIC_c : 0.00	2.54	1.64	2.37	1.26	2.48	2.54
	Weight: 0.319	0.090	0.141	0.098	0.170	0.093	0.090
<i>Diplodactylus pulcher</i>	ΔAIC_c : 15.13	11.48	9.56	14.30	0.00	13.17	7.65
	Weight: 0.001	0.003	0.008	0.001	0.965	0.001	0.021
<i>Lucasium maini</i>	ΔAIC_c : 3.34	5.79	5.21	0.00	4.31	3.01	3.55
	Weight: 0.103	0.030	0.040	0.548	0.064	0.122	0.093
<i>Ctenotus mimetes</i>	ΔAIC_c : 13.09	12.47	15.13	14.26	15.45	0.00	15.59
	Weight: 0.001	0.002	0.001	0.001	0.000	0.994	0.000
<i>Ctenotus pantherinus</i>	ΔAIC_c : 4.53	0.00	6.11	3.16	3.56	3.38	3.83
	Weight: 0.056	0.538	0.025	0.111	0.091	0.099	0.079
<i>Ctenotus schomburgkii</i>	ΔAIC_c : 13.28	7.98	14.55	15.83	12.46	11.29	0.00
	Weight: 0.001	0.018	0.001	0.000	0.002	0.003	0.974
<i>Liopholis inornata</i>	ΔAIC_c : 6.15	8.09	7.41	0.00	8.70	7.03	6.68
	Weight: 0.040	0.015	0.021	0.857	0.011	0.026	0.030
<i>Menetia greyii</i>	ΔAIC_c : 0.75	3.20	0.00	2.90	1.32	2.18	3.20
	Weight: 0.216	0.064	0.315	0.074	0.162	0.106	0.064
<i>Sminthopsis crassicaudata</i>	ΔAIC_c : 18.47	16.06	20.69	9.55	0.00	9.55	19.11
	Weight: 0.000	0.000	0.000	0.008	0.983	0.008	0.000
<i>Sminthopsis dolichura</i>	ΔAIC_c : 0.70	3.12	0.00	1.40	2.44	1.99	3.04
	Weight: 0.214	0.064	0.303	0.151	0.090	0.112	0.066
<i>Sminthopsis gilberti</i>	ΔAIC_c : 1.27	3.80	0.00	3.82	2.63	3.77	3.40
	Weight: 0.218	0.062	0.411	0.061	0.110	0.063	0.075
<i>Notomys mitchellii</i>	ΔAIC_c : 0.00	1.87	0.99	2.49	0.84	1.85	0.76
	Weight: 0.248	0.097	0.152	0.071	0.163	0.098	0.170
<i>Pseudomys hermannsburgensis</i>	ΔAIC_c : 8.65	8.64	6.15	11.18	11.09	7.56	0.00
	Weight: 0.012	0.012	0.042	0.003	0.004	0.021	0.907