

Supplementary material

High post-fire mortality of resprouting woody plants in Tasmanian Mediterranean-type vegetation

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Table S1. Numbers of stems in our study plots according to species and status (alive, completely dead or resprouting)

For many completely dead stems, it was possible to identify them only to genus level

Species	Alive	Dead	Resprouting	Total
<i>Acacia</i> –unidentified		62		62
<i>Acacia mucronata</i>	1	33	6	40
<i>Acacia sophorae</i>		2	1	3
<i>Acacia verticillata</i>	10	9	3	22
<i>Allocasuarina</i> – unidentified		3	2	5
<i>Allocasuarina littoralis</i>		1		1
<i>Allocasuarina monilifera</i>	2	133	4	139
<i>Allocasuarina verticillata</i>	31	213	38	282
<i>Banksia marginata</i>	3	325	1	329
<i>Bursaria spinosa</i>			1	1
<i>Callitris rhomboidea</i>	3	43		46
<i>Dodonaea viscosa</i>	5	2		7
<i>Eucalyptus</i> – unidentified			1	1
<i>Eucalyptus globulus</i>		16	14	30
<i>Eucalyptus nitida</i>			5	5
<i>Exocarpos</i> – unidentified	2		2	4
<i>Hakea</i> – unidentified		7		7
<i>Hakea nodosa</i>		4		4
<i>Hakea terrifolia</i>	2	40		42
<i>Leptospermum</i> – unidentified		72	2	74
<i>Leptospermum laevigatum</i>	62	351	5	418
<i>Leptospermum scoparium</i>	10	62	3	75
<i>Leptospermum squarrosa</i>		2		2
<i>Leucopogon</i> – unidentified	18	27	7	52
<i>Leucopogon parviflorus</i>	7	39	23	69
<i>Melaleuca</i> – unidentified		30	3	33
<i>Melaleuca armillaris</i>		31	12	43
<i>Melaleuca ericifolia</i>	57	2		59
<i>Melaleuca gibbosa</i>	10	28		38
<i>Melaleuca squarrosa</i>		11	1	12
Myrtaceae – unidentified		2		2
<i>Ozothamnus turbinatus</i>	6			6
Unidentified species 1	6	142	3	151
Unidentified species 2		6	1	7
Unidentified species 3		2		2
Total	235	1700	138	2073

Table S2. Comparison of models used to describe resprouting.

Resprouting of all top-killed stems of species with at least 5% resprouting. Based on these results, the w_i values are 1.00 for fire severity, 1.00 for vegetation type (veg) and 0.95 for diameter. Fire severity includes a quadratic term (i.e. severity + severity-squared) and diameter was \log_{10} -transformed. K is the number of parameters in the model, AICc is the Akaike coefficient for small sample size, Delta AICc is the difference relative to the best model, w_i is the Akaike weight (equivalent to the probability of that model being the best in the candidate model set) and % dev expl is the percent deviance explained relative to the null (intercept only) model

Terms	K	AICc	Delta AICc	w_i	% dev expl
severity + diameter + veg	7	527.6	0.0	0.946	9.7
severity + veg	6	533.4	5.8	0.053	8.3
severity + diameter	4	541.6	13.9	0.001	6.1
severity	3	543.2	15.6	0.000	5.5
diameter + veg	5	548.2	20.6	0.000	5.3
veg	4	551.1	23.5	0.000	4.4
null	1	570.1	42.4	0.000	NA
diameter	2	570.8	43.1	0.000	

Table S3. Coefficients and standard errors of the best-supported model of resprouting

Resprouting is expressed on a logit scale. The reference intercept is for heathland vegetation, diameter is in cm and severity is an ordinal score rated on a scale of 1–5. The negative value of the severity-squared term supports a humped relationship, with predicted maximum resprouting at severity of 3.4

Term	Coefficient	s.e.	z value
Intercept	–5.73	1.19	–4.82
Severity	2.80	0.71	3.96
Severity-squared	–0.41	0.11	–3.66
Diameter (log ₁₀ transformed)	1.19	0.43	2.79
Veg – <i>Allocasuarina</i> forest	–1.36	0.31	–4.43
Veg – shrubland	–0.77	0.39	–1.98
Veg – coastal vegetation	–0.85	0.34	–2.51