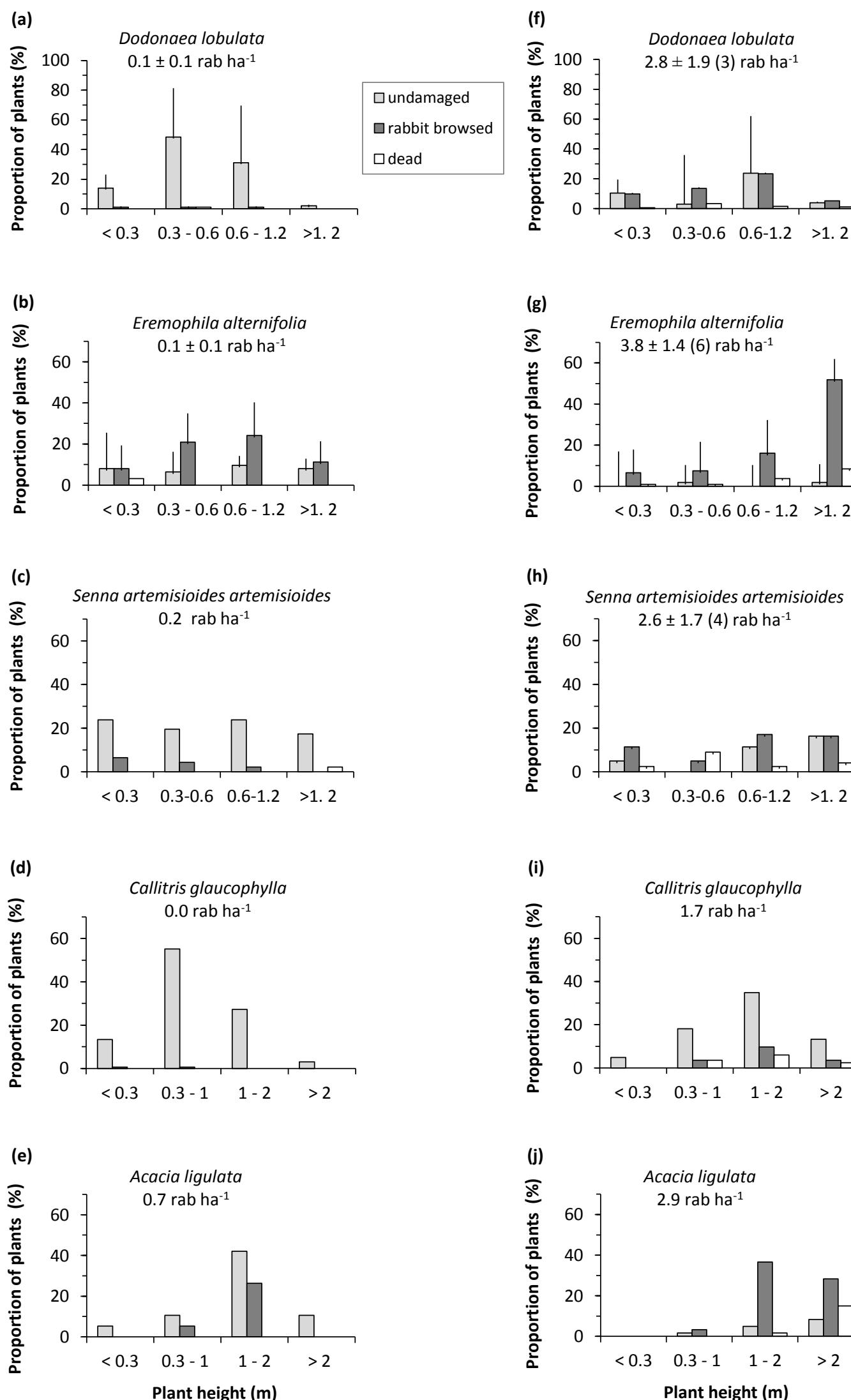


## Estimating density-dependent impacts of European rabbits on Australian tree and shrub populations

Greg Mutze, Brian Cooke and Scott Jennings

### Supplementary data: Figure 1

Population structure and rabbit impact on native vegetation for semi-arid region species in Flinders Ranges National Park, based on height classes. Mean values  $\pm$  standard deviation shown for species at multiple (n) sites with rabbit density  $<0.3$  rabbits  $\text{ha}^{-1}$  or  $>1.6$  rabbits  $\text{ha}^{-1}$ .

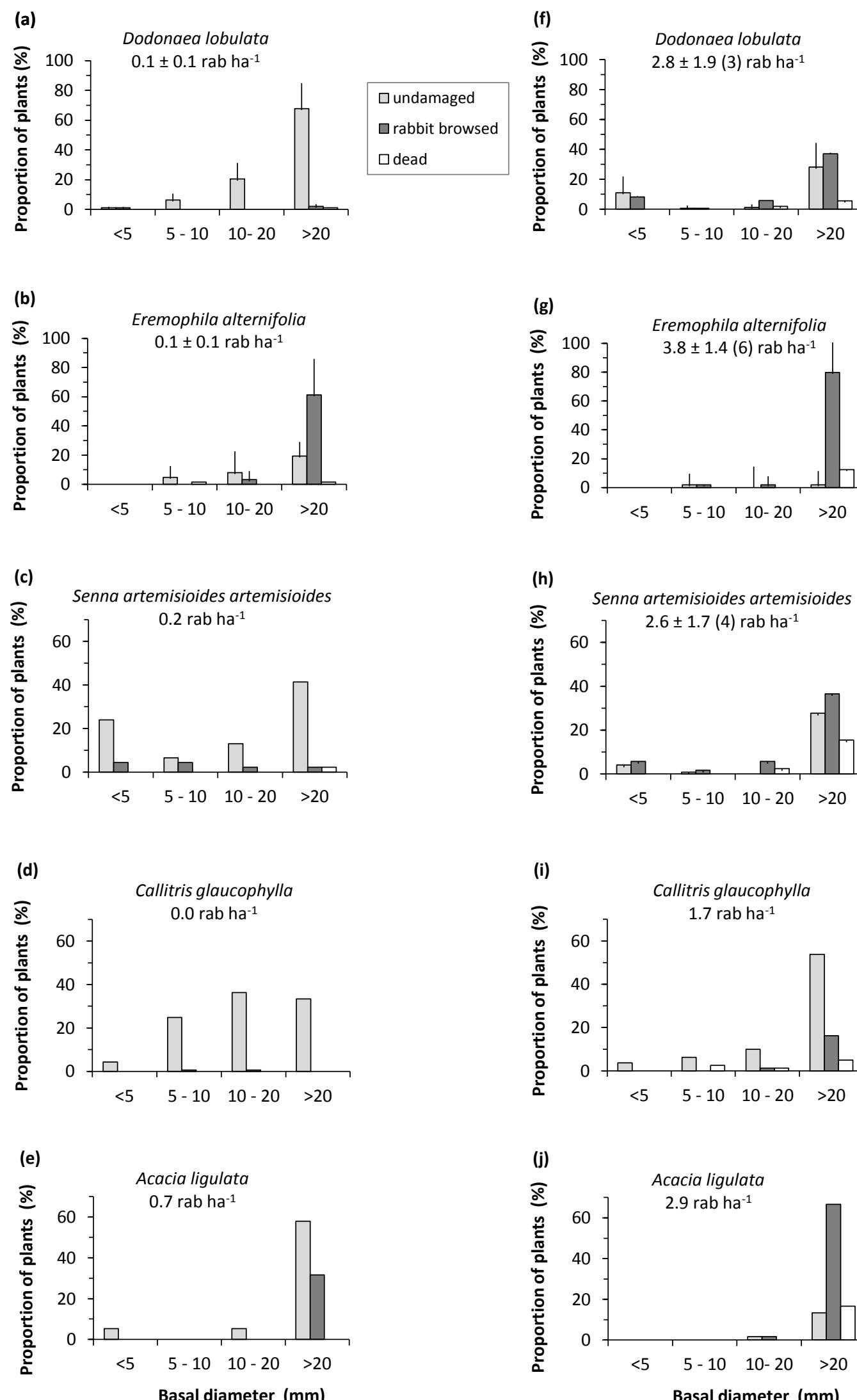


## Estimating density-dependent impacts of European rabbits on Australian tree and shrub populations

Greg Mutze, Brian Cooke and Scott Jennings

### Supplementary data: Figure 2

Population structure and rabbit impact on native vegetation for semi-arid region species in Flinders Ranges National Park, based on basal diameter classes. Mean values  $\pm$  standard deviation shown for species at multiple (n) sites with rabbit density  $<0.3$  rabbits  $\text{ha}^{-1}$  or  $>1.6$  rabbits  $\text{ha}^{-1}$ .

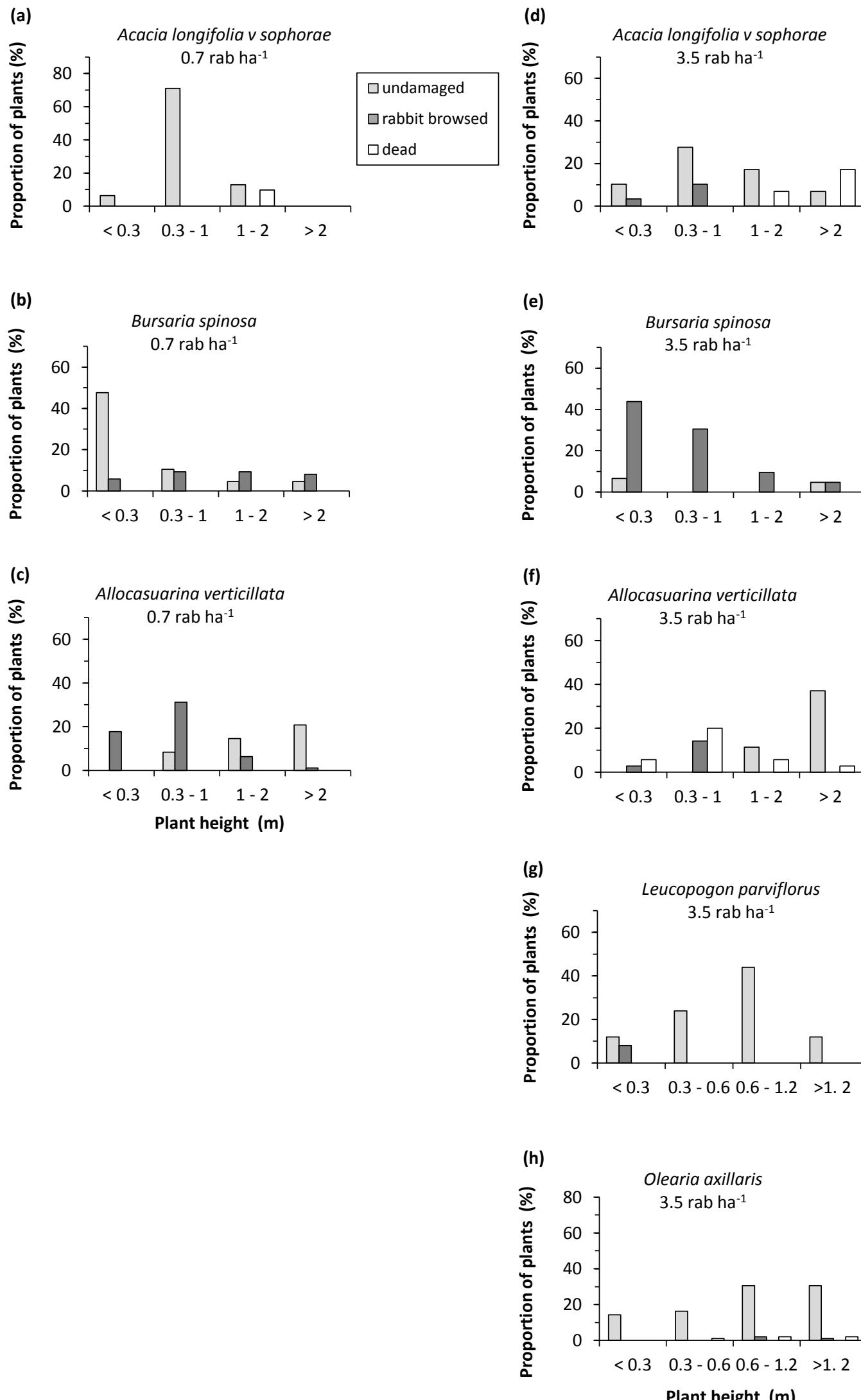


## Estimating density-dependent damage by European rabbits to Australian native tree and shrub communities

Greg Mutze, Brian Cooke and Scott Jennings

### Supporting information: Figure 3

Population structure and rabbit impact on native vegetation for temperate region species in the Coorong region, South Australia, based on height classes.

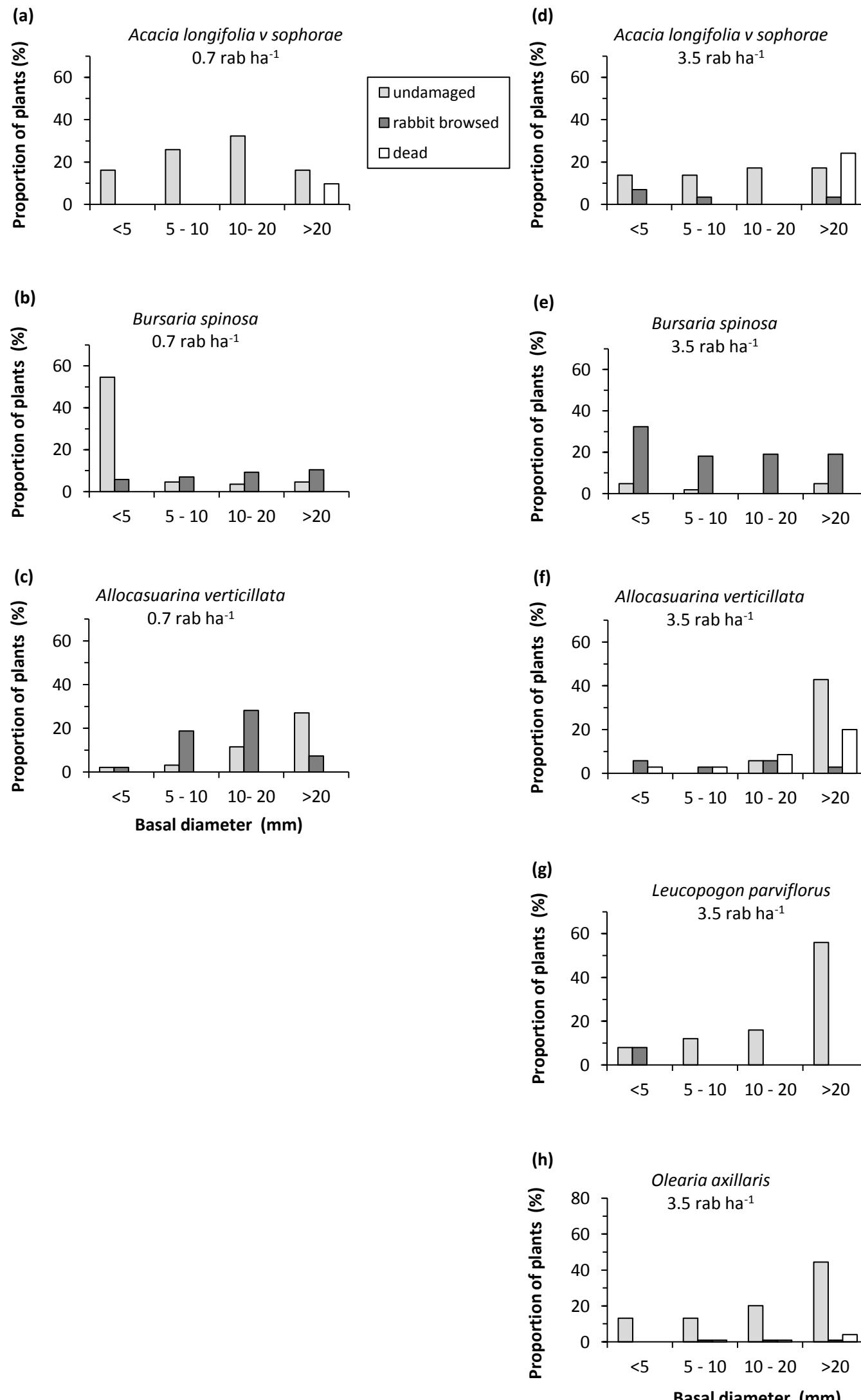


# Estimating density-dependent impacts of European rabbits on Australian tree and shrub populations

Greg Mutze, Brian Cooke and Scott Jennings

## Supporting information: Figure 4

Population structure and rabbit impact on native vegetation for temperate region species in the Coorong region, South Australia, based on basal diameter classes.



## Estimating density-dependent impacts of European rabbits on Australian tree and shrub populations

Greg Mutze, Brian Cooke and Scott Jennings

### Supporting information: Table 1

Rabbit control at experimental sites used for estimating rabbit impact on native vegetation.

At sites where we report no primary rabbit control, there had been none since 1995 and the current property managers knew of none before that time. While we cannot rule out the possibility that rabbit control had been conducted at some much earlier date, there was no evidence to indicate that rabbit population levels in 2012 were limited by previous control work.

Control methods used:

- R - warren destruction by deep ripping (ploughing)
- E - warren destruction by explosives
- P - poisoning with 1080-treated bait
- F - fumigation of warrens

	Primary rabbit control		Maintenance rabbit control	
	Timing	method	Timing	method
Ikara Flinders Ranges National Park <sup>A</sup>				
Rabbit controlled areas	1997-2001	R	2001-2011	E
Other areas	none		none	
Minburra Station				
<i>Acacia carneaorum</i> <sup>B</sup>	1999-2001	R	none	
<i>Maireana sedifolia</i>	1998	R	none	
<i>Sida petrophila</i>	1999-2001	R	none	
Melton Station				
<i>Acacia carneaorum</i>	October 2011	R	none	
<i>Maireana sedifolia</i>	none		none	
<i>Sida petrophila</i>	none		none	
Narrung	2001-2002	PRF	2003	PRF
Coorong National Park <sup>C</sup>	1991	PRF	1992-93	PF
	1997 <sup>D</sup>	PRF	1998-2001	PF
Waite Reserve	none		none	
Dunolly	No records available			
Harcourt	No records available			

<sup>A</sup> On Ikara Flinders Ranges National Park rabbits had not been controlled at all in some areas, while others were subject to warren ripping between 1997-2001 and follow-up treatments (de Preu 2006).

<sup>B</sup> Recovery of rabbit populations at this site was slightly more rapid than at other places on Minburra because of proximity to warrens in nearby stony hills that were inaccessible to ripping (J Rasheed, Minburra Station, personal communication 2015).

<sup>C</sup> At the Coorong National Park site, repeated rabbit control on a 50 ha experimental plot (Bird et al. 2012) ceased in 2001. Populations re-established to levels in adjoining untreated areas within 4-5 years because warren systems of rabbits connected to common wombat warrens could not be ripped (G. Mutze, unpublished data). The potential for similar re-establishment was limited on the nearby Narrung sites because all 2,000 ha of rabbit-infested land on Narrung Peninsula was treated several times as part of an unsuccessful rabbit eradication attempt.

<sup>D</sup> Primary control repeated in the same experimental site following partial recovery of rabbit population.