

## Supplementary material

### **Population monitoring of small and declining brush-tailed rock wallaby (*Petrogale penicillata*) colonies at the extreme of their range using faecal DNA sampling**

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## Contents

**Table S1** Genotypes for 21 individuals identified using faecal DNA genotyping.

**Fig. S1** Additional information for population genetic analyses.

Table S1. Samples collected from five Warrumbungle NP *Petrogale penicillata* colonies showing no. of genotypes, location, sample date and genotype at each locus. An asterisk indicates potential unique genotypes which could not be fully genotyped

Colony	Genotype ID	Sample number	Sample date	Pa55	Me17	Pa297	Pa385	Pa597	Pa593
Mt Uringery	U1	G9	02/02	150/152	145/145	124/130	160/164	106/148	123/137
		G10	02/02	150/152	145/145	124/130	160/164	106/148	123/137
	U2	URT (49)	06/02	150/152	145/145	130/130	164/164	106/148	137/137
		URT (53)	06/02	150/152	145/145	130/130	164/164	106/148	137/137
		URT (65)	06/02	150/152	145/145	130/130	164/164	106/148	137/137
	U3	ACC2 (54)	06/02	150/152	145/145	124/130	160/164	146/148	121/137
		URT (58)	06/02	150/152	145/145	124/130	160/164	146/148	121/137
		[69]	06/02	150/152	145/145	124/130	160/164	146/148	121/137
	U4	URT (57)	06/02	150/152	145/145	124/130	160/164	106/146	137/137
		URT (61)	06/02	150/152	145/145	124/130	160/164	106/146	137/137
	U5	rock3 (62)	06/02	152/152	145/145	130/130	160/164	104/104	121/137
	U6	URT (63)	06/02	150/152	145/145	130/130	164/164	106/146	137/137
	U7	ACC1 (66)	06/02	150/152	155/155	144/144	160/160	100/100	129/129
Black Jack Mt	BJ1	W3	02/02	152/162	149/155	144/144	160/160	102/114	129/137
		Q2	02/02	152/162	149/155	144/144	160/160	102/114	129/137
		W2	02/02	152/162	149/155	144/144	160/160	102/114	129/137
		Q1	02/02	152/162	149/155	144/144	160/160	102/114	129/137
	BJ2	A2	02/02	152/152	149/155	144/144	160/164	100/102	129/137
		E3	02/02	152/152	149/155	144/144	160/164	100/102	129/137
	BJ3	SA7	02/01	152/152	149/155	144/144	156/156	100/114	129/129
	BJ4	L2a	02/01	152/152	149/155	144/144	160/164	100/114	129/129
		SA13	02/01	152/152	149/155	144/144	160/164	100/114	129/129
	BJ5	Nth face [28]	04/01	152/152	155/155	144/144	160/164		129/137
	BJ6	Nth face [18]	06/02	152/162	149/149	144/144	160/164	102/114	129/129
		Nth face [59]	06/02	152/162	149/149	144/144	160/164	102/114	129/129
	*	Nth face [11]		152/152	137/137				
Chalkers Mt	CH1	18	04/02	150/150	137/149	124/130	160/160	102/146	131/131
		[33]	06/02	150/150	137/149	124/130	160/160	102/146	131/131
		[36]	06/02	150/150	137/149	124/130	160/160	102/146	131/131

Wheeh Peak	CH2	21	04/02	150/150	137/137	130/130	160/160	102/146	131/131	
		O6	04/02	150/150	137/137	130/130	160/160	102/146	131/131	
			15	04/02	150/150	137/137	130/130	160/160	102/146	131/131
			[39]	06/02	150/150	137/137	130/130	160/160	102/146	131/131
			32	04/02	150/150	137/137	130/130	160/160	102/146	131/131
	CH3		26	04/02	150/150	137/149	130/130	160/160	102/146	131/131
			[37]	06/02	150/150	137/149	130/130	160/160	102/146	131/131
			CHT [41]	06/02	150/150	137/149	130/130	160/160		131/131
			[45]	06/02	150/150	137/149	130/130	160/160	102/146	131/131
			[75]	08/02	150/150	137/149	130/130	160/160	102/146	131/131
			[76]	08/02	150/150	137/149	130/130	160/160	102/146	131/131
			[38]	06/02	150/150	137/149	130/130	160/160	102/146	131/131
	CH4		O5	04/02	150/150	137/137	130/130	154/160	102/146	131/131
			16	04/02	150/150	137/137	130/130	154/160	102/146	131/131
	Wheeh Peak	WP1	11 [79]	04/01	152/152	145/155	130/130	150/164	112/114	121/137
			09 [80]	04/01	152/152	145/155	130/130	150/164	112/114	121/137
01 [81]			04/01	152/152	145/155	130/130	150/164	112/114	121/137	
14 [82]			04/01	152/152	145/155	130/130	150/164	112/114	121/137	
20 [84]			04/01		145/155	130/130	150/164	112/114	121/137	
05 [85]			04/01		145/155	130/130	150/164	112/114	121/137	
02 [86]			04/01		145/155	130/130	150/164	112/114	121/137	
08 [87]			04/01		145/155	130/130	150/164	112/114	121/137	
17 [88]			04/01		145/155	130/130	150/164	112/114	121/137	
12 [89]			04/01		145/155	130/130	150/164	112/114	121/137	
21 [90]			04/01		145/155	130/130	150/164	112/114	121/137	
3 [91]			04/01		145/155	130/130		112/114	121/137	
18 [92]			04/01		145/155	130/130	150/164	112/114	121/137	
16 [93]			04/01		145/155	130/130	150/164	112/114	121/137	
10 [94]	04/01		145/155	130/130	150/164	112/114	121/137			
Square Top Mt	SQT1	3a	02/01	150/152	149/149	122/122	150/150	100/112		
	SQT2	1e	02/01	150/152		124/134		112/148		
	SQT3	2b	02/01	150/152	149/149		150/150	112/112		
	*	1a						118/118		

Fig. S1. Evaluation of 10 runs in STRUCTURE for each number of presumable clusters from  $K = 1$  to  $K = 7$  for all 19 *Petrogale penicillata* individuals. Likelihood of models in STRUCTURE for increasing number of populations ( $K$ ) is shown above, estimation of the best  $K$  divisions according to Evanno *et al.* (2005) is below.

