

SUPPLEMENTARY DATA (SD2): A *PRIORI* CONCEPTUAL MODELS TESTED USING LOGISTIC REGRESSION TO EVALUATE HABITAT SELECTION BY THE ORGAN MOUNTAINS COLORADO CHIPMUNK (*NEOTAMIAS QUADRIVITTATUS AUSTRALIS*).

Table SD2.1. Second order *a priori* habitat selection models. Descriptions of variables are in the main text Table 1.

Model Number	Distance to drainage	Proportion arid (90m)	Proportion montane scrub (90m)	Proportion riparian (90m)	Proportion woodland (90m)	NDVI (90m)	Folded aspect (90m)	Hillshade (30m)	TPI (90m)	Slope (90m)	VRM (90m)	Cliff	NDVI* Aspect
1	X												
2		X											
3			X										
4				X									
5					X								
6						X							
7							X						
8								X					
9									X				
10										X			
11											X		
12												X	
13						X	X						X
14	X	X											
15	X		X										
16	X			X									
17	X				X								
18	X					X							
19	X						X						
20	X							X					
21	X								X				
22	X									X			
23	X										X		
24	X											X	
25	X					X	X						X
26	X						X	X					
27	X								X	X			
28	X								X		X		

Model Number	Distance to drainage	Proportion arid (90m)	Proportion montane scrub (90m)	Proportion riparian (90m)	Proportion woodland (90m)	NDVI (90m)	Folded aspect (90m)	Hillshade (30m)	TPI (90m)	Slope (90m)	VRM (90m)	Cliff	NDVI* Aspect
29	X										X	X	
30	X			X							X		
31	X			X								X	
32		X	X										
33			X	X									
34			X		X								
35				X	X								
36			X	X	X								
37		X	X		X								
38		X	X	X									
39						X	X						
40						X	X						X
41						X		X					
42						X			X				
43						X				X			
44						X					X		
45						X						X	
46						X	X	X					
47						X			X	X			
48						X			X		X		
49						X					X	X	
50						X	X	X					X
51	X					X	X			X			
52	X					X	X			X			X
53	X					X		X	X	X			
54	X					X		X				X	
55							X	X					
56		X					X	X					
57			X				X	X					
58				X			X	X					
59					X		X	X					
60							X	X	X				
61							X	X		X			

Model Number	Distance to drainage	Proportion arid (90m)	Proportion montane scrub (90m)	Proportion riparian (90m)	Proportion woodland (90m)	NDVI (90m)	Folded aspect (90m)	Hillshade (30m)	TPI (90m)	Slope (90m)	VRM (90m)	Cliff	NDVI* Aspect
62							X	X			X		
63							X	X				X	
64							X	X	X	X			
65							X	X	X		X		
66							X	X			X	X	
67			X				X	X				X	
68						X	X	X				X	
69						X	X	X				X	X
70			X				X	X	X	X			
71						X	X	X	X	X			
72						X	X	X	X	X			X
73									X	X			
74									X		X		
75											X	X	
76		X							X	X			
77			X						X	X			
78				X					X	X			
79					X				X	X			
80							X		X	X			
81								X	X	X			
82		X							X		X		
83			X						X		X		
84				X					X		X		
85					X				X		X		
86							X		X		X		
87								X	X		X		
88		X									X	X	
89			X								X	X	
90				X							X	X	
91					X						X	X	
92							X				X	X	
93								X			X	X	
94	X		X					X	X	X			

Model Number	Distance to drainage	Proportion arid (90m)	Proportion montane scrub (90m)	Proportion riparian (90m)	Proportion woodland (90m)	NDVI (90m)	Folded aspect (90m)	Hillshade (30m)	TPI (90m)	Slope (90m)	VRM (90m)	Cliff	NDVI* Aspect
95	X		X				X		X	X			
96	X					X		X	X	X			
97	X					X	X		X	X			
98	X					X	X		X	X			X
99	X		X				X		X		X		
100	X		X					X	X		X		
101	X					X	X		X		X		
102	X					X		X	X		X		
103	X					X	X		X		X		X
104	X		X				X				X	X	
105	X		X					X			X	X	
106	X					X	X				X	X	
107	X					X		X			X	X	
108	X					X	X				X	X	X
109	X			X			X	X	X	X			
110	X		X				X	X	X	X			
111	X		X				X	X				X	
112					X		X	X	X	X			
113			X				X		X	X			
114			X				X					X	
115	X		X			X	X			X			X
116	X		X		X		X	X		X			
117	X		X		X			X				X	
118	X		X	X	X		X	X	X	X			
119	X		X	X	X		X	X				X	
120													

Table SD2.2. Third order *a priori* habitat selection models. Descriptions of variables are in the main text Table 1.

Model	Distance to Drainage	Arid (90m)	Montane scrub (90m)	Riparian (90m)	Woodland (90m)	NDVI (90m)	Folded aspect (90 m)	Hillshade (30m)	TPI (90m)	Slope (90m)	Cliff (binary)	NDVI*Aspect
1												
2	X											
3		X										
4			X									
5				X								
6					X							
7						X						
8							X					
9								X				
10									X			
11										X		
12											X	
13						X	X					X
14	X	X										
15	X		X									
16	X			X								
17	X				X							
18	X					X						
19	X						X					
20	X							X				
21	X								X			
22	X									X		
23	X										X	
24	X					X	X	X				X
25	X						X	X				
26	X								X	X		
27	X			X							X	
28	X					X		X			X	
29		X	X									
30			X	X								

Model	Distance to Drainage	Arid (90m)	Montane scrub (90m)	Riparian (90m)	Woodland (90m)	NDVI (90m)	Folded aspect (90 m)	Hillshade (30m)	TPI (90m)	Slope (90m)	Cliff (binary)	NDVI*Aspect
31			X		X							
32				X	X							
33			X	X	X							
34		X	X		X							
35		X	X	X								
36						X	X					
37						X		X				
38						X			X			
39						X				X		
40						X					X	
41						X	X	X				
42						X	X	X				X
43						X			X	X		
44	X					X				X		
45	X					X		X	X	X		
46	X					X		X			X	
47	X					X	X				X	X
48							X	X				
49							X	X	X			
50								X		X		
51								X			X	
52								X	X	X		
53			X					X			X	
54						X		X			X	
55			X					X	X	X		
56						X		X	X	X		
57								X	X	X		
58	X					X		X	X	X		
59	X					X	X	X				X
60	X		X					X			X	
61	X					X					X	

Model	Distance to Drainage	Arid (90m)	Montane scrub (90m)	Riparian (90m)	Woodland (90m)	NDVI (90m)	Folded aspect (90 m)	Hillshade (30m)	TPI (90m)	Slope (90m)	Cliff (binary)	NDVI*Aspect
62	X			X					X	X		
63	X		X					X			X	
64					X			X		X		
65			X						X	X		
66			X								X	
67	X				X					X		
68			X		X			X	X	X		
69			X		X			X			X	
70			X	X	X			X	X	X		
71			X	X	X			X			X	
72	X		X	X	X	X		X	X	X		
73	X		X	X	X	X		X			X	
74	X		X	X	X	X	X	X				
75	X		X	X	X	X	X	X				X

Table SD2.3. Micro-habitat *a priori* habitat selection models. Descriptions of variables are in the main text Table 2.

Model number	CWD	Rock	Woody plant diversity	Distance to nearest tree	TPI	Distance to nearest boulder
1	X					
2	X	X	X	X	X	X
3	X	X				
4	X	X	X			
5	X	X	X			X
6	X	X			X	
7	X	X	X	X		X
8	X	X	X		X	X
9	X	X	X		X	
10	X	X				
11	X	X				
12	X					X
13	X				X	
14	X	X	X	X	X	
15						X
16				X		
17				X		X
18				X	X	X
19				X	X	
20		X				
21		X				X
22		X	X		X	
23			X			
24			X	X		X
25			X	X	X	X
26			X		X	
27			X			X
28			X	X		
29		X	X			
30			X	X	X	
31					X	