

BODY SIZE AND COEXISTENCE IN DESERT
RODENTS: CHANCE OR COMMUNITY STRUCTURE?

by

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Appendix A. Data base used in analysis of local coexistence. X's indicate common species which occurred at each site. Sites are designated as being in the Great Basin (G.B.), Mojave (M) or Sonoran (S) Desert. For each rodent species, mean body weight and guild designation (G = granivore, H = herbivore, I = insectivore, O = omnivore) are given in parentheses.

Appendix A.
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Appendix B. Number of grid points in the area of overlap of geographic ranges of desert rodents. Omitted values indicate ranges separated by more than 200 km. Values on the principal diagonal give number of grid points within the geographic range of the species. For each rodent species, mean body weight (in grams) and guild designation (G = granivore, H = herbivore, I = insectivore, O = omnivore) are given in parentheses.

<u>Dipodomys spectabilis</u> (120.1,G)	14
<u>D. deserti</u> (102.7,G)	0 130
<u>D. panamintinus</u> (80.4,G)	- 2 8
<u>D. microps</u> (58.5,H)	- 27 7 241
<u>D. ordii</u> (48.9,G)	14 32 7 241 321
<u>D. merriami</u> (42.3,G)	12 105 7 38 48 240
<u>Microdipodops pallidus</u> (72.5,G)	- 22 3 45 53 22 53
<u>M. megacephalus</u> (12,G)	- 15 5 107 127 26 34 127
<u>Ereognathus hispidus</u> (29.5,G)	3 - - - 4 4 - - 4
<u>E. baileyi</u> (28.2,G)	14 52 - - 55 118 - - - 138
<u>P. formosus</u> (21,G)	- 79 3 52 78 63 28 28 - 10 151
<u>P. californicus</u> (20.5,G)	- 5 3 - - 5 - - - 3 5
<u>P. penicillatus</u> (17.1,G)	6 75 1 - 53 124 - - - 88 28 - 124
<u>P. parvus</u> (16.9,G)	- 27 5 228 230 48 47 127 - - 70 - 0 250
<u>D. spectabilis</u>	
<u>D. deserti</u>	
<u>D. panamintinus</u>	
<u>D. microps</u>	
<u>D. ordii</u>	
<u>D. merriami</u>	
<u>M. pallidus</u>	
<u>M. megacephalus</u>	
<u>P. hispidus</u>	
<u>P. baileyi</u>	
<u>P. formosus</u>	
<u>P. californicus</u>	
<u>P. penicillatus</u>	
<u>P. parvus</u>	
<u>P. spinatus</u>	
<u>P. intermedius</u>	
<u>P. fallax</u>	
<u>P. amplus</u>	
<u>P. apache</u>	
<u>P. flavus</u>	
<u>P. longimembris</u>	
<u>S. townsendii</u>	
<u>S. mohavensis</u>	
<u>S. tereticaudus</u>	
<u>A. harrisi</u>	
<u>A. leucurus</u>	
<u>E. minimus</u>	
<u>R. megalotis</u>	
<u>P. eremicus</u>	
<u>P. maniculatus</u>	
<u>O. leucogaster</u>	
<u>O. torridus</u>	
<u>N. lepidula</u>	
<u>N. albigula</u>	

Appendix B. Number of grid points in the area of overlap of geographic ranges of desert rodents. Omitted values indicate ranges separated by more than 200 km. Values on the principal diagonal give number of grid points within the geographic range of the species. For each rodent species, mean body weight (in grams) and guild designation (G = granivore, H = herbivore, I = insectivore, O = omnivore) are given in parentheses.

	<u>D. spectabilis</u>	<u>D. deserti</u>	<u>D. panamintinus</u>	<u>D. microps</u>	<u>D. ordii</u>	<u>M. merriami</u>	<u>M. pallidus</u>	<u>M. megacephalus</u>	<u>P. hispidus</u>	<u>P. baileyi</u>	<u>P. formosus</u>	<u>P. californicus</u>	<u>P. penicillatus</u>	<u>P. parvus</u>	<u>P. spinatus</u>	<u>P. intermedius</u>	<u>P. fallax</u>	<u>P. amplus</u>	<u>P. apache</u>	<u>P. flavus</u>	<u>P. longimembris</u>	<u>S. townsendii</u>	<u>S. mohavensis</u>	<u>S. tereticaudus</u>	<u>A. harrisi</u>	<u>A. leucurus</u>	<u>E. minimus</u>	<u>R. megalotis</u>	<u>P. eremicus</u>	<u>P. maniculatus</u>	<u>O. leucogaster</u>	<u>O. torridus</u>	<u>N. lepida</u>	<u>N. albiquia</u>
<u>P. spinatus</u> (16.5,G)	-	13	-	-	-	51	-	-	35	33	0	13	-	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>P. intermedius</u> (13.2,G)	6	33	-	-	22	70	-	-	2	50	0	-	55	-	0	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
<u>P. fallax</u> (13.1,G)	-	10	-	-	-	22	-	-	-	3	3	3	9	-	2	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>P. amplus</u> (10.6,G)	14	42	-	0	24	58	-	-	4	41	0	-	56	-	0	69	-	71	-	-	-	-	-	-	-	-	-	-	-	-	-			
<u>P. apache</u> (9,G)	-	-	-	-	36	-	-	-	-	-	-	-	-	3	-	19	-	-	36	-	-	-	-	-	-	-	-	-	-	-	-			
<u>P. flavus</u> (7.2,G)	7	-	-	-	10	11	-	-	4	10	-	-	10	-	-	12	-	11	20	38	-	-	-	-	-	-	-	-	-	-	-			
<u>P. longimembris</u> (7.2,G)	-	83	5	117	120	86	46	127	-	12	124	3	8	128	8	3	14	0	-	0	178	-	-	-	-	-	-	-	-	-	-			
<u>Spermophilus townsendii</u> (27.0)	-	34	6	108	221	41	53	127	-	-	63	-	0	250	-	-	-	-	-	-	-	121	304	-	-	-	-	-	-	-	-	-		
<u>S. mohavensis</u> (148,0)	-	3	2	0	-	4	-	-	-	-	2	3	4	-	-	-	3	-	-	-	-	4	0	4	-	-	-	-	-	-	-	-		
<u>S. tereticaudus</u> (145,0)	2	136	-	25	4	141	-	-	1	51	37	-	85	0	4	73	0	71	-	4	11	3	0	144	-	-	-	-	-	-	-	-	-	
<u>Peromyscus harrisi</u> (125,0)	13	41	-	0	28	83	-	-	4	93	0	-	87	-	0	71	-	71	-	31	0	0	0	6	106	-	-	-	-	-	-	-	-	-
<u>A. leucurus</u> (105,0)	-	88	4	154	21	141	47	98	-	-	138	5	15	207	49	0	20	0	33	-	161	244	4	47	0	339	-	-	-	-	-	-	-	-
<u>Eutamias minimus</u> (33.5,0)	-	3	4	154	273	11	12	83	-	-	13	-	0	250	-	-	-	-	0	-	63	271	-	-	0	250	304	-	-	-	-	-	-	
<u>Reithrodontomys megalotis</u> (8.6,0)	14	118	8	241	241	240	53	127	4	111	145	5	114	250	28	75	19	71	36	38	173	304	4	116	69	339	304	443	-	-	-	-	-	-

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	<u>D. spectabilis</u>	<u>D. deserti</u>	<u>D. panamintinus</u>	<u>D. microps</u>	<u>D. ordii</u>	<u>D. merrami</u>	<u>M. pallidus</u>	<u>M. neogaecephalus</u>	<u>P. hispidus</u>	<u>P. bairdii</u>	<u>P. formosus</u>	<u>P. californicus</u>	<u>P. penicillatus</u>	<u>P. parvus</u>	<u>P. spinatus</u>	<u>P. intermedius</u>	<u>P. fallax</u>	<u>P. amplus</u>	<u>P. apache</u>	<u>P. flavus</u>	<u>P. longimembris</u>	<u>S. townsendii</u>	<u>S. mohavensis</u>	<u>S. tereticaudus</u>	<u>A. harrisi</u>	<u>A. leucurus</u>	<u>E. minimus</u>	<u>R. megalotis</u>	<u>P. eremicus</u>	<u>P. maniculatus</u>	<u>O. leucogaster</u>	<u>O. torridus</u>	<u>N. lepida</u>	<u>N. albiquila</u>
<u>Peromyscus eremicus</u> (25.2,0)	14	104	4	5	2	221	-	-	4	138	81	5	124	5	51	75	22	71	-	11	68	36	4	144	106	123	7	255	255					
<u>P. maniculatus</u> (18.1,0)	10	121	8	241	321	240	53	127	4	89	151	5	102	250	51	70	22	64	36	36	176	241	4	100	106	339	304	197	200	458				
<u>Oryzomys leucogaster</u> (38.6,I)	3	13	5	154	281	46	53	127	4	0	64	-	7	215	-	7	-	4	31	27	108	288	-	0	3	242	304	304	20	304	304			
<u>O. torridus</u> (25.6,I)	14	113	4	59	79	193	18	19	4	42	93	5	-	46	12	75	5	71	-	9	96	34	4	144	106	79	3	166	190	143	19	203		
<u>Neotoma lepida</u> (110.2,H)	-	111	6	241	236	121	53	127	-	36	151	5	34	231	51	36	22	21	-	-	154	304	4	65	27	339	304	434	172	434	304	120	434	
<u>Neotoma albiquila</u> (77.2,H)	14	41	-	-	31	93	-	-	4	81	3	-	101	0	3	75	0	71	5	8	2	4	-	105	106	10	-	96	125	64	3	125	32125	