

Appendix 1. Taxa and Assession Number from GenBank of specimens used to construct phylogeny of Mojave Desert nocturnal rodents.

Accession Number	Taxon
AY926401	<i>Chaetodipus californicus</i>
AY926402	<i>Chaetodipus fallax</i>
AY926387	<i>Chaetodipus formosus</i>
AY926389	<i>Chaetodipus intermedius</i>
AY926388	<i>Chaetodipus penicillatus</i>
AY926398	<i>Chaetodipus spinatus</i>
AY926366	<i>Dipodomys agilis</i>
AY926381	<i>Dipodomys deserti</i>
AY926383	<i>Dipodomys merriami</i>
AY926385	<i>Dipodomys microps</i>
AF173501	<i>Dipodomys ordii</i>
AY926384	<i>Dipodomys panamintinus</i>
AY926367	<i>Dipodomys simulans</i>
AY926362	<i>Microdipodops megacephalus</i>
AY926361	<i>Microdipodops pallidus</i>
AF163891	<i>Microtus californicus</i>
AF187230	<i>Microtus longicaudus</i>
AF119280	<i>Microtus montanus</i>
AF108704	<i>Neotoma albigula</i>
DQ179859	<i>Neotoma cinerea</i>
DQ781302	<i>Neotoma devia</i>
DQ179853	<i>Neotoma lepida</i>
DQ179844	<i>Neotoma macrotis</i>
DQ179852	<i>Neotoma stephensi</i>
AF119277	<i>Ondatra zibethicus</i>
AY195794	<i>Onychomys leucogaster</i>
AY275110	<i>Onychomys torridus</i>
AY926413	<i>Perognathus alticola</i>
AY926403	<i>Perognathus amplus</i>
AY926405	<i>Perognathus flavus</i>
AY926404	<i>Perognathus inornatus</i>
AY926408	<i>Perognathus longimembris</i>
AY926407	<i>Perognathus parvus</i>
DQ861379	<i>Peromyscus boylii</i>
AF155393	<i>Peromyscus californicus</i>
EF028168	<i>Peromyscus crinitus</i>
DQ973100	<i>Peromyscus eremicus</i>
EF666274	<i>Peromyscus maniculatus</i>
DQ861375	<i>Peromyscus truei</i>
AY859468	<i>Reithrodontomys megalotis</i>
AJ238588.1	<i>Sciurus vulgaris</i>

Appendix 2. Species richness, average phylogenetic distance and p-value from null model analysis for each of 31 communities distributed throughout the Mojave National Preserve. RSR and PSR refer to rodent and plant species richness, respectively.

Type	RSR	Phylogenetic Structure			Environmental Structure	
		MPD _{obs}	MPD _{exp}	P-Value	PSR	Volume (m ³)
Alkali playa	2	0.217	0.235	0.246	3	70.52
Alkali playa	6	0.223	0.221	0.505	5	77.31
Blackbrush woodland	8	0.216	0.221	0.193	33	373.77
Blackbrush woodland	9	0.222	0.221	0.525	19	337.35
Blackbrush woodland	6	0.209	0.220	0.102	13	647.24
Blackbrush woodland	6	0.209	0.220	0.120	13	374.72
Creosote bajada	5	0.240	0.221	0.015	4	234.55
Creosote bajada	7	0.218	0.221	0.739	9	356.71
Creosote bajada	5	0.240	0.220	0.016	12	179.82
Creosote bajada	6	0.235	0.221	0.016	4	219.18
Creosote bajada	6	0.231	0.221	0.137	6	154.42
Creosote bajada	6	0.219	0.221	0.584	4	115.23
Creosote bajada	6	0.233	0.220	0.058	14	404.09
Joshua tree woodland	6	0.209	0.221	0.097	14	161.08
Joshua tree woodland	9	0.213	0.222	0.108	25	152.62
Joshua tree woodland	6	0.209	0.221	0.112	20	129.72
Joshua Tree woodland	7	0.218	0.221	0.255	23	221.23
Joshua Tree woodland	7	0.218	0.221	0.256	21	152.98
Lava field	6	0.219	0.221	0.392	14	104.63
Lava field	5	0.228	0.221	0.672	15	118.72
Piñon-Juniper woodland	6	0.219	0.221	0.461	26	828.46
Piñon-Juniper woodland	7	0.206	0.221	0.068	23	433.03
Piñon-Juniper woodland	6	0.211	0.221	0.176	26	509.20
Sand Dune	7	0.232	0.221	0.050	4	26.94
Sand Dune	6	0.231	0.220	0.120	6	123.04
Yucca woodland	7	0.224	0.221	0.597	24	204.24
Yucca woodland	5	0.230	0.221	0.734	19	167.89
Yucca woodland	7	0.218	0.221	0.278	24	276.64
Yucca woodland	7	0.218	0.221	0.261	21	248.84
Yucca woodland	6	0.209	0.220	0.114	20	299.08
Yucca woodland	6	0.209	0.220	0.106	20	259.64