



TRAPPING REPORT

To: California Department of Fish and Wildlife:
Craig Bailey, Scott Osborn, Esther Burkett, Benessa Espinosa, Margarita Gordus, Chad Hirano

United States Fish and Wildlife Service:
Wildlife Recovery Permit Coordinator – Sacramento Fish and Wildlife Office, Chris Kofron, Patricia Cole, Justin Sloan

From: Joe McFaddin - MESA Biological
Adam Grimes - MESA Biological

Cc: Shelleena Pernot - ICF

Date: October 26, 2023

SUBJECT: Small Mammal Presence/Absence Trapping Survey the Southern California Edison Gorman to Kern River Project, Kern County, CA

During the period spanning July 11, 2023, through September 22, 2023, Adam Grimes and Joe McFaddin (permitted trappers) conducted small mammal presence/absence trapping at the Southern California Edison Gorman to Kern River Overhead Power Transmission Line Replacement Project, Kern County, CA (Site). Trapping was conducted in accordance with United States Fish and Wildlife Service (USFWS) Recovery Permit TE 94654B-0 and California Department of Fish and Wildlife (CDFW) Memorandum of Understanding (MOU) 20190814, and conditions described in the 2013 USFWS Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats.

Trapping was coordinated through ICF Environmental Consulting who provided project routing maps indicating the current location of the transmission line towers and proposed worksites. Prior to conducting trapping efforts, MESA Biological LLC (MESA) assessed the towers and worksites to locate potential presence of the Federal and State Endangered Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*). The assessment focused on recording burrows potentially suitable for kangaroo rat while analyzing habitats to determine potential for presence. Based on presence of suitable habitats containing a relatively widespread burrow density, MESA concluded that a grid style setup

throughout each tower location and worksite would optimize the potential to detect presence of Tipton kangaroo rat. The grid trapping format was circulated in the emailed notification of intent to conduct small mammal trapping as well as communicated via conference call with regional USFWS and CDFW staff in attendance. Figures 1 – 6 illustrate the trap placements used for this sampling effort.

Trapping was conducted over 6-sessions and resulted in no detection of listed small mammals and was isolated to four small mammal species representing all trapped species, Heermann's kangaroo rat (*Dipodomys heermanni*), deer mouse (*Peromyscus maniculatus*), San Joaquin pocket mouse (*Perognathus inornatus*) and California ground squirrel (*Otospermophilus beecheyi*). In total, 104 Heermann's kangaroo rats, 114 San Joaquin pocket mice and 59 deer mice were captured with 128 noted as recaptured and released without additional processing. A single California ground squirrel was captured and released without additional handling or processing. As a precautionary measure, given the endemic presence of hantavirus (Sin nombre virus; Hanta cardiopulmonary syndrome), estimated at up to 12 percent of deer mouse populations, the 59 deer mice were not processed directly or marked for recapture statistics and released. Notes on recapture of this species were estimated due to proximity and frequency of presence of deer mice within a specific trap group at a trap grid. Non-mammal vertebrates collected in traps was isolated to a single species represented by western toad (*Anaxyrus boreas*).

Identification of kangaroo rat species was based on toe count, and measured mass and hind foot length and were always consistent with the range of characteristics typical of Heermann's kangaroo rat. To aid in identification of recaptured kangaroo rats and pocket mice, initial captures were belly marked with a non-toxic felt pen after gathering required physical measurements. Capture locations were documented on handheld GPS enabled devices.

All captured animals were released in immediate proximity to the respective trapping location and done so without incident or mortality. A few animals were observed with minor abrasions and discoloration proximal to the nose, typical of those attempting escape, but were generally minor in concern and not considered detrimental to immediate health of each respective specimen. No animals were considered under duress, appeared generally healthy, and were active shortly after release.

No factors were identified that would have reduced trapping efficiency to the extent that if animals were present, they would have gone undetected. If present in the designated trapping locations, the extent of coverage and trapping effort in approximately the same period should have resulted in detection of the target small mammal species.

Figure 1. Trapping Locations at Southern California Edison Gorman to Kern River Project. Base of Grapevine, Comanche Point Front, Comanche T-Segment







**Table 1. Trapping Session Results – Base of Grapevine, Comanche Point Front,
Comanche T-Segment**

Time of Capture (24-Hour)	Species Abbreviation		Species Determination	Sex	Reproductive Status	Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	PEIN = San Joaquin pocket mouse (<i>Perognathus inomatus</i>)									
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)									
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)									
	ANBO = western toad (<i>Anaxyrus boreas</i>)									
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)									
Base of Grapevine (South) July 11, 2023 - Trapper: Joe McFaddin / Scribes: Rory Miller										
23:50	PEIN		Morph	Female	NR	7	17		34.95931741	-118.9132756
23:47	PEIN	recapture	Morph						34.95942097	-118.9133716
23:36	PEMA								34.96211982	-118.909834
23:22	DIHE		Mass HF	Male	SCR	70	40		34.96285793	-118.9091692
23:20	DIHE	recapture							34.96271998	-118.9091605
23:18	DIHE	recapture							34.96276677	-118.9091936
06:34	PEIN		Morph	Unknown	NR	9	16		34.95940895	-118.9133957
06:27	PEIN		Morph	Male	NR	9	14		34.95941243	-118.9134681
06:11	PEMA		Morph						34.96206231	-118.9098517
06:00	DIHE		Morph	Female	NR	70	40		34.96272289	-118.9090904
05:57	DIHE		Morph	Female	NR	67	38		34.96271118	-118.9090637
05:50	DIHE		Mass HF	Female	NR	78	39		34.96348089	-118.9085872
05:46	PEIN		Morph	Unknown	NR	9	17		34.96322561	-118.9082844
05:31	DIHE		Mass HF	Female	NR	51	39		34.96495855	-118.9065121
05:23	DIHE		Mass HF	Male	NR	79	38		34.96489698	-118.9062201
05:22	PEIN		Morph	Female	NR	11	17		34.9608443	-118.9119296
05:17	PEMA								34.96083777	-118.9112187
05:13	PEMA	recapture							34.96205833	-118.9099109
05:02	DIHE	recapture							34.96288804	-118.9091532
05:00	DIHE	recapture							34.962786	-118.9091858
04:56	PEIN	recapture							34.96325477	-118.9083066
01:17	DIHE		Mass HF	Male	NR	81	39		34.96355604	-118.9084894
00:51	PEIN		Morph	Female	NR	9			34.96099567	-118.9114045
Base of Grapevine (South) July 12, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre										
23:56	PEIN		Morph	Female	NR	9	15		34.9606961	-118.911791
23:43	DIHE	recapture							34.96270376	-118.909103
23:42	DIHE	recapture							34.96277829	-118.9092127
23:38	DIHE	recapture							34.96287815	-118.9091666
23:37	OTBE		Morph						34.96338035	-118.9085018
23:32	DIHE		Morph	Female	NR	70	40		34.96337301	-118.9080822
23:30	DIHE		Morph	Female	NR	65	39		34.96322134	-118.9082895
23:17	DIHE		Morph	Female	NR	68	39		34.96454466	-118.9066303
05:40	PEMA								34.95799699	-118.9151255
05:20	PEMA	recapture							34.96203676	-118.9098954
05:08	DIHE	recapture							34.96284894	-118.9091578
05:01	PEMA								34.96354228	-118.9082767
04:48	DIHE	recapture							34.964818	-118.9063069
04:48	DIHE		Mass HF	Male	NR	61	40		34.96462428	-118.9064782
00:06	PEMA		Morph						34.95780588	-118.9149337
Base of Grapevine (South) July 13, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre										
23:47	PEIN		Morph	Female	NR	10	15		34.95949239	-118.9135032
23:44	PEIN		Morph	Male	NR		19		34.95964168	-118.9131187
23:25	DIHE	recapture							34.96278032	-118.9092071
23:22	DIHE		Mass HF	Female	NR	70	40		34.96339048	-118.9080872
23:19	DIHE	recapture							34.96320968	-118.9082465
23:13	PEMA								34.96497558	-118.9065299

Time of Capture (24-Hour)	Species Abbreviation		Capture Status	Species Determination	Sex	Reproductive Status	Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	PEIN = San Joaquin pocket mouse (<i>Perognathus inornatus</i>)										
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)										
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)										
	ANBO = western toad (<i>Anaxyrus boreas</i>)										
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)										
23:10	DIHE	recapture								34.96456111	-118.9066224
22:59	DIHE		HF Mass	Male	ABD	69	40			34.96617166	-118.9052395
05:53	PEIN		Morph	Female	NR	9	17	Small healing laceration below right eye. Not trapping induced		34.95674602	-118.9164073
05:45	PEIN									34.95839145	-118.9148927
05:33	PEIN									34.96068856	-118.911788
05:30	PEMA									34.96094604	-118.9112953
05:16	DIHE	recapture								34.96287065	-118.9091537
05:14	DIHE	recapture								34.96277067	-118.9091839
05:11	DIHE		HF mass	Male	ABD	33	38			34.96282598	-118.9089944
04:58	PEMA									34.96457212	-118.9066004
04:48	DIHE		Mass HF	Female	NR	23	38	Emaciated. Hind legs very thin		34.9659612	-118.9049584
00:04	PEMA									34.9568299	-118.9165258
00:00	PEIN		Morph	Female	NR	10	16			34.95667237	-118.9162925
Base of Grapevine (South) July 14, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre, Jaden Drake											
23:09	DIHE	recapture								34.96464745	-118.9065236
23:11	PEMA									34.96515227	-118.9065333
23:21	DIHE		Mass HF	Female			40			34.96341126	-118.9084689
23:28	DIHE	recapture								34.9627702	-118.9092091
23:24	DIHE	recapture								34.96286487	-118.9091734
23:45	PEIN	recapture								34.96069805	-118.9118004
23:45	PEMA									34.96079522	-118.9119206
06:08	PEMA									34.96072413	-118.9116218
06:16	PEIN			Female	NR	9	15			34.96212429	-118.9098354
05:01	DIHE	recapture								34.96336997	-118.9081063
05:06	PEMA									34.96353047	-118.9083168
05:09	DIHE	recapture								34.96355777	-118.9085313
05:17	DIHE	recapture								34.96481591	-118.9063589
05:20	DIHE	recapture								34.96456814	-118.9066144
05:22	DIHE	recapture	Mass HF	Female	NR	72	40			34.96462905	-118.9065112
Base of Grapevine (North) August 1, 2023 - Trapper: Joe McFaddin, Adam Grimes / Scribe: Rory Miller, Rodney Aguirre, Jeffrank Solorzano											
23:53	PEIN		Morph	Male	SCR	11	18			34.93540506	-118.9239799
23:31	PEIN		Morph	Female	REP	9	18			34.93901524	-118.9229854
05:40	PEMA		Morph							34.93695395	-118.923824
05:03	PEMA		Morph							34.9478625	-118.9206284
04:35	PEMA		Morph							34.95635638	-118.9164691
Base of Grapevine (North) August 2, 2023 - Trapper: Joe McFaddin, Adam Grimes / Scribe: Karla Lopez, Rodney Aguirre, Samantha Medellin											
23:46	PEIN		Morph	Female	NR	11	17			34.93530654	-118.9243852
23:30	PEMA		Morph							34.93866006	-118.9230908
Base of Grapevine (North) August 3, 2023 - Trapper: Joe McFaddin, Adam Grimes / Scribe: Karla Lopez, Rodney Aguirre, Jeffrank Solorzano											
23:37	PEIN	recapture								0	0
23:35	PEIN		Morph	Female	NR	11	17			34.9386839	-118.9232108
23:24	PEMA		Morph							34.94270256	-118.9222243
23:13	PEIN		Morph	Female	NR	10	18			34.94583758	-118.9213302
23:09	PEMA		Morph							34.94787571	-118.9206405

Time of Capture (24-Hour)	Species Abbreviation		Species Determination	Sex	Reproductive Status	Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	PEIN = San Joaquin pocket mouse (<i>Perognathus inomatus</i>)									
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)									
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)									
	ANBO = western toad (<i>Anaxyrus boreas</i>)									
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)									
Capture Status										
23:04	PEMA		Morph						34.94973263	-118.9199612
05:32	PEMA								34.93486724	-118.9244715
05:12	PEMA		Morph						34.9391032	-118.9229406
04:47	PEMA		Morph						34.94787107	-118.9206331
04:42	PEMA		Morph						34.94933054	-118.9202386
Base of Grapevine (North) August 4, 2023 - Trapper: Joe McFaddin, Adam Grimes / Scribe: Karla Lopez, Rodney Aguirre, Dorothy Tran										
06:46	PEIN		Morph	Male	SCR	10	19		0	0
06:42	PEIN		Morph	Male	SCR	12	18		34.93442002	-118.9245958
06:39	PEMA	recapture							34.93485102	-118.9244823
06:36	PEIN		Morph	Male	SCR	10	19		34.93530543	-118.924094
06:34	PEMA	recapture							0	0
06:29	PEMA	recapture							0	0
06:24	PEMA	recapture							0	0
06:14	PEIN		Morph	Female	NR	8	17		34.93908629	-118.9229438
06:10	PEIN	recapture							0	0
05:48	PEMA		Morph						34.94785186	-118.9206414
05:32	PEIN		Morph	Male	SCR	10	18		34.95316849	-118.9189108
05:27	PEMA	recapture							34.95334471	-118.9191111
05:23	PEMA		Morph						34.95508429	-118.9180373
Base of Grapevine (North) August 5, 2023 - Trapper: Joe McFaddin, Adam Grimes / Scribe: Samantha Medellin, Rory Miller Rodney Aguirre, Dorothy Tran										
23:53	PEMA								34.94016568	-118.9226598
23:45	PEIN	recapture							34.93903496	-118.9229859
23:15	PEMA	recapture							34.9478999	-118.9206217
23:13	PEMA		Morph						34.94801127	-118.9205922
23:09	PEMA		Morph						34.94974232	-118.9199824
22:53	PEMA	recapture							34.95512018	-118.9180272
06:01	PEMA		Morph						34.9369322	-118.9238008
00:13	PEIN		Morph	Male	SCR	11	18		0	0
00:10	PEIN	recapture							34.93535857	-118.9240883
00:09	PIEN	recapture		Male					34.9344657	-118.9245872
00:07	PEMA	recapture							34.93523984	-118.9240779
00:06	PEMA								34.93446381	-118.924311
00:06	Pema								34.93489818	-118.9244726
00:04	PEMA								34.93695073	-118.9238196
00:03	PIEN			Female		10	17		34.94024313	-118.9225987
00:03	PEMA								34.93501965	-118.924339
00:02	PEMA		Morph						34.93546255	-118.9239584
Comanche Point Front (South) August 8, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre										
23:09	DIHE		Morph	Male	SCR	74	42		35.12433651	-118.8410065
22:42	DIHE		Morph	Female	NR	70	39		35.12570283	-118.8411298
05:23	PEIN		Morph	Male	SCR	10	17		35.12747139	-118.8403772
05:07	DIHE		Morph	Male	SCR	58	41		35.12615491	-118.8409829
05:05	PEIN		Morph	Female	NR	10	17		35.12579498	-118.8408154
04:41	DIHE		Morph	Male	SCR	57	39		35.11680891	-118.8408764
04:39	DIHE		Morph	Male	SCR	66	39	Nose appeared raw. No residual blood or other fluids inside trap.	35.11681483	-118.8410155

Time of Capture (24-Hour)	Species Abbreviation		Capture Status	Species Determination	Sex	Reproductive Status	Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	PEIN = San Joaquin pocket mouse (<i>Perognathus inornatus</i>)										
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)										
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)										
	ANBO = western toad (<i>Anaxyrus boreas</i>)										
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)										
Comanche Point Front (South) August 9, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre											
23:06	DIHE		Morph	Female	NR	65	36			35.12248807	-118.840994
22:47	DIHE		Morph	Male	NR	60	39			35.11899071	-118.8411115
22:46	DIHE		Morph	Female	NR	60	38			35.11703871	-118.8411677
05:36	DIHE	recapture								35.12566232	-118.8411656
05:22	DIHE		Morph	Male	SCR	66	37			35.1223385	-118.8409388
05:13	DIHE		Morph	Male	ABD	59	39			35.11855784	-118.8411871
Comanche Point Front (South) August 10, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre											
23:22	DIHE	recapture								35.12570457	-118.8411003
23:19	DIHE		Morph	Male	SCR	69	40			35.12574243	-118.8411773
23:18	DIHE		Morph	Male	SCR	81	41			35.12604754	-118.8410481
23:10	DIHE		Morph	Male	SCR	75	40			35.1243381	-118.8410271
23:06	DIHE	recapture								35.12434521	-118.8410437
23:05	DIHE		Morph	Female	NR	28	36	Young		35.12251987	-118.8410933
23:02	DIHE		Morph	Female	NR	57	35			35.12250718	-118.8410731
23:01	DIHE	recapture								35.12242845	-118.8410485
22:57	DIHE		Morph	Male	SCR	70	40			35.11876473	-118.8411838
22:49	DIHE	recapture								35.11703815	-118.8412145
22:47	DIHE		Morph	Female	NR	58	39			35.1178071	-118.8411109
05:52	PEIN			Male	SCR	11	18			35.12821435	-118.8398691
05:50	DIHE		Morph	Male	SCR	66	38			35.12696678	-118.8403139
05:39	DIHE			Male	SCR	74	41			35.12612698	-118.8408791
05:27	DIHE	recapture								35.12432168	-118.8410587
05:23	DIHE	recapture								35.12270989	-118.8409338
05:19	DIHE		Morph	Male	SCR	93	44			35.12056685	-118.8411106
05:15	DIHE	recapture								35.11850194	-118.8411522
05:12	PEIN	recapture		Unknown		7	16			35.11852866	-118.8408939
05:10	PEIN			Male	SCR	11	17			35.11672281	-118.8410419
05:07	DIHE	recapture								35.1170398	-118.8411749
05:06	DIHE	recapture								35.11681505	-118.8409347
05:03	DIHE	recapture								35.11671345	-118.8409006
Comanche Point Front (South) August 11, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre											
05:37	PEIN			Male	SCR	10	17			35.12649322	-118.8406734
05:28	DIHE	recapture								35.12578558	-118.8410988
05:18	DIHE	recapture								35.124342	-118.841024
05:14	DIHE	recapture								35.12251457	-118.8410454
01:03	DIHE	recapture								35.12432497	-118.8410329
00:58	DIHE	recapture								35.12239792	-118.8409561
00:56	DIHE	recapture								35.12230641	-118.8409384
00:50	DIHE	recapture								35.11874699	-118.84114
00:48	DIHE	recapture								35.11851055	-118.8411712
00:44	PEIN	recapture								35.11670256	-118.840918
00:42	DIHE	recapture								35.12253478	-118.8411316
00:41	DIHE	recapture								35.11695071	-118.8412541
00:41	DIHE			Male	SCR	70	42			35.1170324	-118.8410253

Time of Capture (24-Hour)	Species Abbreviation		Capture Status	Species Determination	Sex	Reproductive Status		Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude	
	PEIN = San Joaquin pocket mouse (<i>Perognathus inornatus</i>)												
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)												
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)												
	ANBO = western toad (<i>Anaxyrus boreas</i>)												
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)												
Comanche Point Front (South) August 12, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Rodney Aguirre, Josue Leyva													
23:18	DIHE	recapture									35.12575921	-118.8410456	
23:07	DIHE	recapture									35.12434462	-118.8410306	
23:03	DIHE	recapture									35.122437	-118.8409292	
06:40	DIHE				Female	NR	65	43			35.12814627	-118.8400132	
06:26	DIHE	recapture									35.12704613	-118.8402758	
06:15	DIHE		Morph		Male	SCR	67	36			35.12567114	-118.8409816	
06:11	DIHE	recapture									35.12579573	-118.8410835	
05:59	DIHE	recapture									35.12431857	-118.8410579	
05:55	DIHE	recapture									35.12250854	-118.8411062	
05:47	DIHE	recapture									35.11870847	-118.8409613	
05:36	DIHE		Morph		Female	NR	54	39			35.11695172	-118.8409789	
Comanche Point Front (North) and Comanche T- Segment (West) August 28, 2023 - Trapper: Adam Grimes / Scribe: Dorothy Tran													
05:52	ANBO										35.17310505	-118.7979682	
05:36	PEIN										35.18251481	-118.7860921	
04:58	DIHE				Male	SCR	59	39			35.13786328	-118.8304852	
04:43	PEIN										35.13224055	-118.8374425	
04:41	DIHE				Female	NR	66	37			35.12894757	-118.8392887	
Comanche Point Front (North) and Comanche T- Segment (West) August 29, 2023 - Trapper: Adam Grimes / Scribe: Samantha Medellin, Rory Miller													
23:02	DIHE		Morph		Male	SCR	65	40			35.14066081	-118.8238814	
22:56	DIHE	recapture									35.13785704	-118.8304788	
05:40	PEMA										35.17283495	-118.7981554	
Comanche Point Front (North) and Comanche T- Segment (West) August 30, 2023 - Trapper: Adam Grimes / Scribe: Karla Lopez, Rory Miller, Samantha Medellin													
23:58	ANBO										35.17309784	-118.7949783	
23:22	PEIN		Morph		Male	SCR	10	15			35.137869	-118.8310807	
23:18	DIHE	recapture									35.13788377	-118.8304834	
23:10	DIHE				Male	SCR	72	40			35.13637115	-118.8328099	
23:02	PEIN		Morph		Male	NR	10	12			35.13180487	-118.8377129	
05:41	ANBO										35.17309876	-118.7948484	
Comanche Point Front (North) September 1, 2023 - Trapper: Adam Grimes / Scribe: Karla Lopez, Rory Miller, Dorothy Tran													
22:52	DIHE	recapture									35.13787531	-118.8304779	
22:40	PEIN		Morph		Male	SCR	10	12			35.13186119	-118.8379489	
05:10	DIHE	recapture									35.13798232	-118.8309743	
04:56	DIHE				Male	SCR	69	40			35.13649118	-118.8327732	
Comanche Point Front (North) September 2, 2023 - Trapper: Adam Grimes / Scribe: Josue Leyva, Rory Miller													
22:48	DIHE	recapture									35.1363364	-118.832571	
22:48	PEIN	recapture									35.13793138	-118.8309983	
22:37	DIHE				Male	SCR	71	42			35.13469863	-118.8347677	
05:26	PEIN				Male	SCR	13	17			35.13812639	-118.8307538	
05:09	PEIN	recapture									35.13487044	-118.834997	
Comanche T-Segment (West) September 18, 2023 - Trapper: Joe McFaddin / Scribe: Dorothy Tran, Rory Miller													

Time of Capture (24-Hour)	Species Abbreviation		Species Determination	Sex	Reproductive Status		Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	Capture Status										
	PEIN = San Joaquin pocket mouse (<i>Perognathus inornatus</i>)				NR = non-reproductive						
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)				SCR = scrotal						
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)				INT = intermediate						
	ANBO = western toad (<i>Anaxyrus boreas</i>)				ABD = abdominal						
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)				REP = reproductive						
23:16	PEIN		Morph	Female	Unknown		10	16		35.173149	-118.7782742
23:03	PEIN			Male	NR		10	16		35.17320889	-118.7815991
22:37	DIHE		Morph	Female	NR		48	42		35.17321634	-118.7845489
05:43	PEMA									35.17326722	-118.7749761
05:40	PEMA									35.17337535	-118.7758558
05:39	PEMA									35.17316957	-118.7757081
05:39	PEIN			Male	ABD		10	17		35.17336703	-118.7761241
05:23	PEIN			Female	NR		8	18		35.17320199	-118.7820146
05:16	PEIN			Male	ABD		7	16		35.17310651	-118.7843959
05:10	DIHE		Morph	Male	SCR		80	43		35.17303993	-118.7846692
04:57	PEIN			Female	NR		5	15		35.17316405	-118.785457
Comanche T-Segment (West) September 19, 2023 - Trapper: Joe McFaddin / Scribe: Rory Miller, Samantha Medellin											
23:34	PEIN		Morph	Female	NR		10	15		35.17330572	-118.7769166
23:30	PEIN			Male	SCR		12	18	Sores inside leg	35.17333451	-118.7749054
23:27	PEMA									35.17325063	-118.7756778
23:24	PEIN			Unknown			11	17	Parasite or sores inside hind legs	35.17313797	-118.7745985
23:18	PEIN			Male	SCR		11	16		35.17338173	-118.7764317
23:17	PEIN		Morph	Male	SCR		12	18		35.17318014	-118.7783165
23:10	PEIN	recapture								35.17320479	-118.7788491
23:05	PEIN			Unk			7	17		35.17331947	-118.78204
23:01	PEIN		Morph	Male	SCR		12	16		35.17313135	-118.7824615
22:58	PEIN			Male	ABD		8	17		35.17320264	-118.78441
22:55	PEIN		Morph	Female	NR		10	17		35.17318838	-118.7843806
22:53	DIHE		Morph	Male	SCR		56	38		35.17312186	-118.7849162
05:33	PEIN			Male	ABD		11	17		35.1732651	-118.7772297
05:32	PEIN			Male	INT		10	17		35.17325883	-118.7781898
05:30	PEMA									35.17325041	-118.7758967
05:26	PEMA									35.17317707	-118.7758363
05:25	PEMA									35.17319958	-118.7752226
05:18	DIHE			Male			77	40		35.17317379	-118.777214
05:13	DIHE		Morph	Female	NR		68	39		35.17331409	-118.7788899
05:13	PEMA									35.17314772	-118.7781645
05:09	PEIN			Male	ABD		8	18		35.17310126	-118.7819013
05:05	PEMA									35.17333202	-118.784368
05:04	PEIN			Male	SCR		12	18		35.17321721	-118.7818789
05:00	PEMA									35.17323776	-118.7816006
04:59	PEMA									35.17331716	-118.7819003
04:53	DIHE	recapture								35.17300239	-118.7846653
04:50	DIHE	recapture								35.17320042	-118.784532
04:50	DIHE			Male			68	39		35.17323964	-118.7854134
Comanche T-Segment (West) September 20, 2023 - Trapper: Joe McFaddin / Scribe: Dorothy Tran, Rodney Aguirre											
23:28	PEMA	recapture								35.17329412	-118.774993
23:23	PEIN	recapture								35.1733553	-118.7763982
23:23	PEIN			Male	NR		10	17		35.17335062	-118.7758772
23:19	PEIN	recapture		Male	NR		13	16		35.173285	-118.7750045
23:17	DIHE	recapture								35.17330403	-118.778915
23:17	PEMA									35.17323968	-118.7758712
23:14	PEIN	recapture								35.17323952	-118.7772299

Time of Capture (24-Hour)	Species Abbreviation		Capture Status	Species Determination Morph = Morphology Mass HF =	Sex	Reproductive Status NR = non-reporoductive SCR = scrotal INT = intermediate ABD = abdominal REP = reproductive	Mass (grams)	Hind Foot Length (mm)	Health/Comments	Latitude	Longitude
	PEIN = San Joaquin pocket mouse (<i>Perognathus inomatus</i>)										
	PEMA = deer mouse (<i>Peromyscus maniculatus</i>)										
	DIHE = Heermann's kangaroo rat (<i>Dipodomys heermanni</i>)										
	ANBO = western toad (<i>Anaxyrus boreas</i>)										
	OTBE = California ground squirrel (<i>Otospermophilus beecheyi</i>)										
23:11	PEIN	recapture								35.17332497	-118.7820362
23:11	PEIN			Male	NR		9	15		35.17324645	-118.7773648
23:09	PEIN			Female	NR		12	17		35.1732378	-118.7777887
23:06	PEIN	recapture		Male	NR		10	15		35.17323088	-118.7792146
23:02	PEIN	recapture								35.1733315	-118.7845358
23:01	PEIN	recapture		Female	NR		13	18		35.17320543	-118.7817538
22:59	PEIN			Unknown			11	17		35.17330031	-118.7846456
22:54	PEIN			Unknown			11	17		35.17311105	-118.7846425
22:49	PEIN			Female	NR		11	16		35.17318374	-118.7848959
05:25	PEMA									35.17324015	-118.7760008
05:19	PEIN	recapture		Female	NR		10	17		35.17324232	-118.7769509
05:18	PEIN			Male	SCR		11	18		35.1732426	-118.7792107
05:14	DIHE	recapture		Male	NR		71	39	5th toe observed	35.17322505	-118.778933
05:10	PEMA	recapture								35.17331483	-118.7819053
05:08	PEIN	recapture		Female	NR		9	16		35.17319765	-118.7818933
05:07	DIHE			Female	NR		76	41	Fifth toe present	35.17321055	-118.7819005
05:02	DIHE	recapture								35.17312965	-118.78482
04:57	DIHE									35.17317622	-118.7854505
04:42	DIHE			Male	NR		69	39	5th toe present.	35.17309008	-118.7859413
Comanche T-Segment (West) September 21, 2023 - Trapper: Joe McFaddin / Scribe: Samantha Medellin, Rory Miller											
23:35	DIHE	recapture								35.17326088	-118.7928971
23:21	PEIN	recapture								35.17322542	-118.7769712
23:20	PEIN	recapture								35.17315179	-118.7781728
23:19	PEIN	recapture								35.17314818	-118.7783397
23:17	PEMA									35.17321389	-118.7780722
23:17	PEIN	recapture								35.17317221	-118.7758469
23:12	PEIN	recapture								35.1732209	-118.7780864
23:08	PEIN	recapture								35.17314059	-118.7783029
23:01	PEIN	recapture								35.17319998	-118.7816179
22:52	PEIN		Morph	Male	NR		10	15		35.17315582	-118.7848548
22:42	DIHE	recapture								35.17304122	-118.7846958
05:39	PEIN	recapture								35.17328876	-118.7792133
05:31	PEIN						15	17		35.17336285	-118.7761337
05:26	PEMA									35.17315687	-118.7757322
05:23	PEIN									35.17316838	-118.776815
05:22	PEIN						18	22		35.17316584	-118.7770812
05:21	PEMA									35.17323756	-118.7760052
05:15	PEMA									35.17319196	-118.7758187
05:09	PEMA									35.17328464	-118.7820242
05:06	PEIN	recapture								35.1730876	-118.7818907
05:02	PEIN	recapture								35.17309217	-118.7818682
05:01	PEIN									35.17330296	-118.7846536
04:58	PEMA									35.17333175	-118.7843659
04:56	DIHE	recapture								35.17306024	-118.7846911
04:52	DIHE	recapture								35.1732651	-118.7772297
04:46	DIHE	recapture								35.17318067	-118.7854415
Comanche T-Segment (West) September 22, 2023 - Trapper: Joe McFaddin / Scribe: Dorothy Tran, Rodney Aguirre											
23:39	PEIN			Female	NR		9	16		35.17325326	-118.7777824

