



**August 30, 2016**

**MOHAVE GROUND SQUIRREL SURVEY REPORT**

**SOMERSET PROJECT TTM 16805**

**City of Victorville, California**

**Prepared By**

Philippe Vergne

**ENVIRA**

P.O. Box 2612, Ramona, California, USA 92065

Phone 619-885-0236 E-mail PHVERGNE@AOL.COM

# Mohave Ground Squirrel Report for Somerset Project

---

## TABLE OF CONTENTS

### Section

- 1.0 EXECUTIVE SUMMARY
- 2.0 PROJECT AND PROPERTY DESCRIPTION
- 3.0 BACKGROUND MOHAVE GROUND SQUIRREL
- 4.0 FOCUSED STUDY/SPECIES OF CONCERN
- 5.0 METHODS
- 6.0 MOHAVE GROUND SQUIRREL SURVEY RESULTS
- 7.0 IMPACTS AND RECOMMENDATIONS
- 8.0 CERTIFICATION
- 9.0 REFERENCES

### FIGURES

- Figure 1 Regional Location
- Figure 2 Project Boundaries
- Figure 3 Trapping Grid Corners
- Table 1 Live Trapping Dates
- Table 2 Grid Census Locations
- Table 3 Live Trapping Data Summary

### APPENDICES

- Appendix A CDFW MGS MOU
- Appendix B WEATHER DATA
- Appendix C PHOTOGRAPH LOG
- Appendix D PLANT SPECIES OBSERVED WITHIN THE STUDY AREA
- Appendix E WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA

# Mohave Ground Squirrel Report for Somerset Project

---

## 1.0 EXECUTIVE SUMMARY

Philippe Vergne of ENVIRA was contracted by Glen Lukos and Associates to conduct a phase one Mohave ground squirrel (*Xerospermophilus mohavensis*)-MGS survey, and focused trapping survey on a proposed housing development located in the western part of Victorville, California. The project site lies west of State Route (S.R.) 395 at the southeastern corner of Monte Vista and Luna Roads.

The site is located in Section 29 , Township 5 north, Range 5 west, on the Baldy Mesa U.S. Geological Survey (USGS) 7.5' topographic map, San Bernardino base and meridian.

This report documents the findings of baseline Mohave ground squirrel trapping surveys for the Project Site shown on Figure 1- Project Vicinity. The intended use of this document is to disclose the presence or absence of MGS within the Project limits. For the purposes of this document, the Project's study area is the 40.36 acre-property boundary outlined in red on Figure 2-Project Boundaries.

There are two plant communities within the expansion area. The first is sparse disturbed creosote scrub. The second is scrub with Joshua Tree woodland.

MGS were not detected within the Project Site or within the census grid during any of three live trapping sessions.

# Mohave Ground Squirrel Report for Somerset Project

---

## 2.0 PROJECT AND PROPERTY DESCRIPTION

For the purposes of this report, the “study area” includes the Project’s proposed ground disturbance footprint (Project Site) up to the property boundary (Figure 2). The estimated total proposed project acreage is 40.36 acres.

The project is located in the western part of Victorville, California. It lies west of State Route (S.R.) 395 at the southeastern corner of Monte Vista and Luna Roads.

The site is located in Section 29 , Township 5 north, Range 5 west, on the Baldy Mesa U.S. Geological Survey (USGS) 7.5’ topographic map, San Bernardino base and meridian.

The proposed project is for a residential housing development and associated infrastructure.

## 2.1 SITE VEGETATION

There are two plant communities within the proposed project site.

The first is sparse creosote scrub. Dominant plants within this community are sparse creosote bush (*Larrea tridentata*), and forbs such as desert fiddleneck (*Amsinckia tessellata*) and Russian thistle (*Salsola tragus*), and non-native red brome (*Bromus madritensis ssp. rubens*).

The second is sparse open creosote scrub with Joshua Tree woodland. Dominant plants within this community are creosote bush scrub, including creosote bush, burrobrush (*Ambrosia dumosa*), California buckwheat (*Eriogonum fasciculatum*), Joshua Tree (*Yucca brevifolia*), cheesebush (*Hymenoclea salsola*), Mormon tea (*Ephedra nevadensis*), and annual wildflowers, forbs and grasses including Fremont’s pincushion (*Chaenactis fremontii*), desert dandelion (*Malacothrix glabrata*), red-stemmed filaree (*Erodium cicutarium*), and desert suncup (*Camissonia campestris*).

A list of plant species observed is provided in Appendix D.

## 2.2 SITE TOPOGRAPHY AND SOILS

The site is mostly flat, with a very slight slope trending northeast to southwest. The soils are non-compacted sandy loam.

## 2.3 WILDLIFE

Observations of wildlife included scat, trails, tracks, burrows, skeletal remains, calls and visual sightings. Species observed included side-blotched lizard (*Uta stansburiana*), Great Basin whiptail (*Aspidoscelis tigris tigris*), antelope ground squirrel (*Ammospermophilus leucurus*), house finch (*Carpodacus neomexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*) and common raven (*Corvus corax*) nesting in a Joshua tree.

## Mohave Ground Squirrel Report for Somerset Project

---

A list of wildlife species observed is provided in Appendix E. Appendix C shows a photography of the raven nest and the night lizard observed on the study area.

### 3.0 BACKGROUND ON MOHAVE GROUND SQUIRREL

The MGS was listed as a rare species in 1971 under the authority of the California State Endangered Species Act of 1970 (CESA) and was re-designated as a state threatened species in 1985 (Gustafson 1993). The MGS is small, grayish, diurnal squirrel. The California Department of Fish and Wildlife (CDFW) is the responsible agency that provides for its protection and management.

MGS are dormant in the fall and winter months, but emerge from hibernation in February and begin pair bonding and mating during March (Gustafson 1993). If rainfall is adequate, MGS will reproduce. If rainfall levels are not sufficient to support substantial annual plant growth, then MGS will merely forage on herbaceous perennials and shrubs until they gain ample body mass for another prolonged period of dormancy (Gustafson 1993). The adult males can enter dormancy as early as late May. Juveniles will remain above-ground until August in order to acquire generous fat reserves prior to entering dormancy.

MGS occur in the western half of the Mojave Desert. Its historical range encompasses an area between Antelope Valley and Lucerne Valley, in the south (Gustafson 1993). However, MGS occurrences in the southern portion of its range are very unusual. The northern limits of the range are near Owens Dry Lake bed, in the north, and through China Lake Naval Weapons Station and Fort Irwin Military Base in the east (Gustafson 1993). The eastern limit of the species range extends to Barstow and south along the Mojave River. The western limits loosely follow State Highway 14 and the foothills of the southern Sierra Nevada escarpment (Gustafson 1993). Several other common squirrels occur within their range; antelope ground squirrel (AGS; *Ammospermophilus leucurus*), round-tailed ground squirrel (RTGS; *Xerospermophilus tereticaudus*) and the California ground squirrel (CGS; *Spermophilus beecheyi*).

## 4.0 FOCUSED STUDY/SPECIES OF CONCERN

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of biological resources<sup>1</sup> that have the potential to exist within and adjacent to the study area; resources within several miles of the Project Site were evaluated .

The materials reviewed included, but were not limited to, the following:

1. U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2013a);
2. USFWS Ventura Field Office Species List for San Bernardino County (2013b);
3. California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW 2013);
4. California Native Plant Society (CNPS) Electronic Inventory (CNPS 2013); and
5. Aerial Photographs (Microsoft Corporation 2013).

## 5.0 METHODS

Survey methods were derived from generally accepted professional standards including the 2010 California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines (CDFG 2010); and performed under the auspices of a Memorandum of Understanding (MOU) with the CDFW (Appendix A). Accordingly, a methodical pedestrian-survey of the study area was conducted to visually evaluate the limits of suitable habitat on April 7, 2016.

Since no MGS were detected during the visual survey, but potential burrows and scat were observed on site, MGS focused trapping surveys were initiated. Census occurred within one live-trapping grid, situated in the Project Site's highest quality habitat (Figure 3).

Per protocol since no MGS were captured during trapping surveys one and two, a third five-day trapping session was conducted, at the same location as follows: Session One April 23-27; Session Two May 15-19; Session Three June 16-20, of 2016.

---

1 For the purposes of this analysis, "biological resources" refers to the plants, wildlife, and habitats that occur, or have the potential to occur, within the study area.

## Mohave Ground Squirrel Report for Somerset Project

---

Within the grid, 100 traps were deployed at roughly 30-meter (m) spacing. The grid consisted of a ten by ten array, and covered approximately 22 acres (Figure 3). Standard small-mammal aluminum, foldable, ventilated 12-inch Sherman Traps were used within the Project Site for sampling purposes. The bait used consisted of crushed four-way grains with molasses, peanut butter, and water. Folding cardboard boxes held down by dirt were deployed as shade covers for each trap as appropriate. Traps and shade covers were configured to provide the greatest shade cover possible.

Temperature readings were taken and recorded every hour, at 1 foot above the ground and at ground level in the shade. Traps were checked every 2-3 hours depending on temperature and other environmental influential factors (i.e., pregnant or lactating females in traps, feral dogs on grid, cold weather, presence of juveniles, etc.). Traps were open within 1 hour after sunrise and closed within 1 hour before sunset. Traps were closed when air temperature reached 90 °F (four days in June), when temperature fell below 50 °F (late morning opening three days in April). No rain occurred during the surveys. Low or high temperatures and rain were not a major factor during the surveys. Weather data for each trapping session is provided within Appendix B.

During live trapping surveys, plants were identified to the lowest taxonomic level sufficient to determine whether the plant species observed were non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded. The presence of a wildlife species was based on direct observation and/or wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). Field data compiled for wildlife species included scientific name, common name, and evidence of sign when no direct observations were made. Wildlife of uncertain identity was documented and subsequently identified from specialized field guides and related literature. A reference list is attached to the document in Section 9.0.

# Mohave Ground Squirrel Report for Somerset Project

---

## 6.0 SURVEY RESULTS

Weather data for each trapping session and representative photos of the study area are provided within Appendices B and C, respectively. All plant species observed during the surveys are identified within Appendix D and wildlife species observed are detailed in Appendix E. Additionally, survey dates, grid locations by session, and trapping data are summarized in Tables 1, 2, and 3.

The visual survey was conducted on April 7, 2016 from 7:30 AM until 3 PM.

**Table 1. Live Trapping Dates**

Grid No.	First Session	Second Session	Third Session
1	04/23/2016 to 04/27/2016	05/15/2016 to 05/19/2016	06/16/2016 to 06/20/2016

**Table 2. Grid Census Locations**

Grid No. and Trapping Session	Grid Corners
Grid 1 – Three Sessions	NW 117-26-4.13 W 34-29-28.81 N SW 117-26-4.13 W 34-29-18.73 N NE 117-25-48.92 W 34-29-24.79 N SE 117-25-48.92 W 34-29-18.73 N



## Mohave Ground Squirrel Report for Somerset Project

---

**Table 3. Live Tapping Data Summary**

Category	Grid A Individuals (recaptures)	Total for Project Including re-captures
Trap Hours, Per Trap	182.0	182.0
Captures Totals All Species		
MGS Captures	0	0
MGS Adult Male Captures	0	0
MGS Adult Female Captures	0	0
MGS Juvenile Male Captures	0	0
MGS Juvenile Female Captures	0	0
MGS Unknown Sex	0	0
AGS Captures	19 (23)	42
AGS Adult Male Captures	6 (12)	18
AGS Adult Female Captures	12(11)	23
AGS Juvenile Male Captures	1 (0)	1
AGS Juvenile Female Captures	0	0
AGS Unknown Sex	0	0
Incidental Captures (excluding AGS)	4 <i>Dipodomys merriami</i>	4
Number Of Species Captured	2	2

MGS were not detected in the Project Site or within any census grids during any of the three live trapping sessions. Two species were trapped within the grid.

## Mohave Ground Squirrel Report for Somerset Project

---

Total trap hours were in excess of 182 hours, averaging approximately 12.1 hours per day or 60 hours per live trapping event, and total captures were 88 representing 19 individual AGS and 4 Merriam's kangaroo rats (captured in AM at first trap check). There were no MGS captures. Capture totals were low and did not vary much by sessions. The lowest capture total was session 3, with only 4 captures.

### 7.0 IMPACTS AND RECOMMENDATIONS

The majority of the Project Site consists of sparse to medium density scrub.

An estimated 30 acres of the property (area trapped) has medium to good quality fairly undisturbed habitat. The other 10 or so acres is low quality habitat due to disturbances.

The proximity to dirt access road and paved frontage roads, off road vehicle (ORV) activity along the dirt roads, trash dumping, human and pet use of the area, all contribute to limiting the overall habitat quality for MGS occupancy.

Historical MGS occurrence records show that the species was historically detected about four miles to the northeast of the project site.

No MGS were observed or captured within the Project Site. The Project Site does not currently support MGS.

Therefore, project implementation will not result in the loss of individual MGS, nor will it adversely affect local or regional MGS populations.

## Mohave Ground Squirrel Report for Somerset Project

---

### 8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached figures present the data and information required for this resource assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this investigation was performed by me. I certify that I have not signed a nondisclosure or consultant confidentiality agreement nor do I have any financial interest in the Project.

DATE: August 30, 2016

SIGNED: *Philippe Jean Vergne*

Report Author Philippe Vergne

# Mohave Ground Squirrel Report for Somerset Project

---

## 9.0 REFERENCES

- Burt, W. H. 1986. *A Field Guide to the Mammals in North America North of Mexico*. Houghton Mifflin Company, Boston, Massachusetts.
- Baldwin, J., D. Goldman, D. Keil, R. Patterson, and T. Rosatti. 2012. *The Jepson Manual: Higher Plants of California*. Berkeley: University of California Press.
- CDFG (California Department of Fish and Game). 2010. Mohave Ground Squirrel Survey Guidelines. July
- CDFW (California Department of Fish and Wildlife). 2013. RareFind California Department of Fish and Game Natural Diversity Database (CNDDDB). Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.
- California Natural Diversity Data Base. 2009. Data Base report on threatened, endangered, rare or otherwise sensitive species and communities in the vicinity of the project site.
- CNPS (California Native Plant Society). 2013. CNPS Electronic Inventory of Rare and Endangered Plants: CNPS.
- Garrett, K. and J. Dunn. 1981. *Birds of Southern California*. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.
- Grinnell, J. 1933. Review of the Recent Mammal Fauna of California. *University of California Publications in Zoology*, 40:71-234.
- Gustafson, John. 1993. A Status Review of the Mojave Ground Squirrel (*Spermophilus mohavensis*). Department of Fish and Game. Wildlife Management Division. March 1993.
- Hall, E.R. 1981. *The Mammals of North America, Volumes I and II*, John Wiley and Sons, New York, New York.
- Hanes, T.L., R.D. Friesen, and K. Keane. 1989. Alluvial Scrub Vegetation in Coastal Southern California. U.S. Department of Agriculture, Forest Service Gen. Tech. Rep. PSW-110.
- Hickman, J.C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press.
- Ingles, L.G. 1965. *Mammals of the Pacific States*. Stanford University Press, Stanford, California.
- Laudenslayer, Jr., W.F., W.E. Grenfell, Jr. and D.C. Zeiner. 1991. A Check-list of the Amphibians, Reptiles, Birds and Mammals of California. *California Fish and Game*, 77:109-141.
- Microsoft Corporation. 2013. Bing Maps Aerial Imagery. Redmond, WA
- Munz, P.A. 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.
- USGS (United States Geological Service). 1970. 7.5-Minute Quadrangle, California.

## Mohave Ground Squirrel Report for Somerset Project

---

USFWS (United States Fish and Wildlife Service). 2013a. Critical Habitat Portal. USFWS

USFWS (United States Fish and Wildlife Service). 2013b. Ventura Fish and Wildlife Office Endangered and Threatened Species List. In: U.S. Department of the Interior, editor. Carlsbad, CA: USFWS.

Figure One Somerset Project Site Vicinity

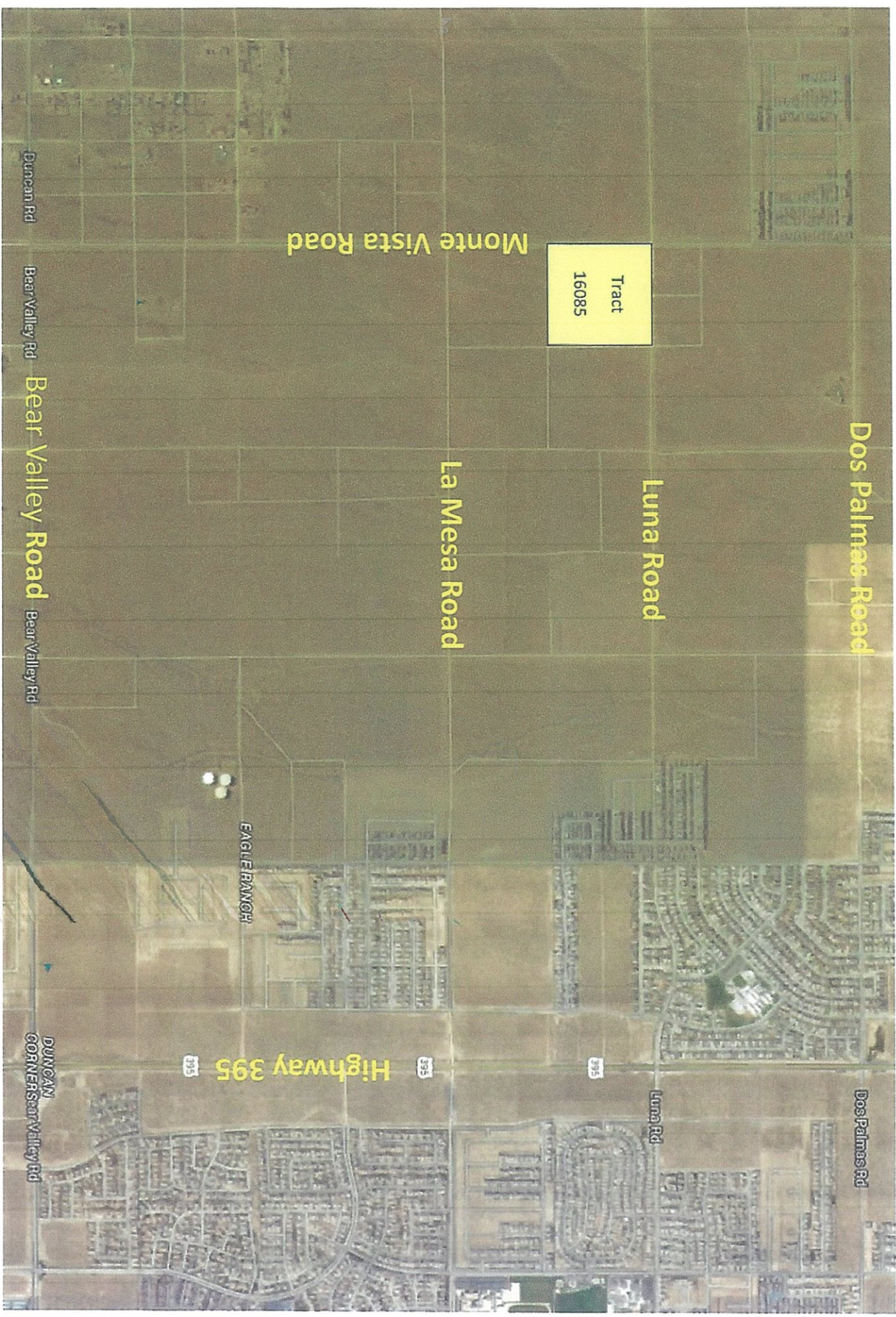
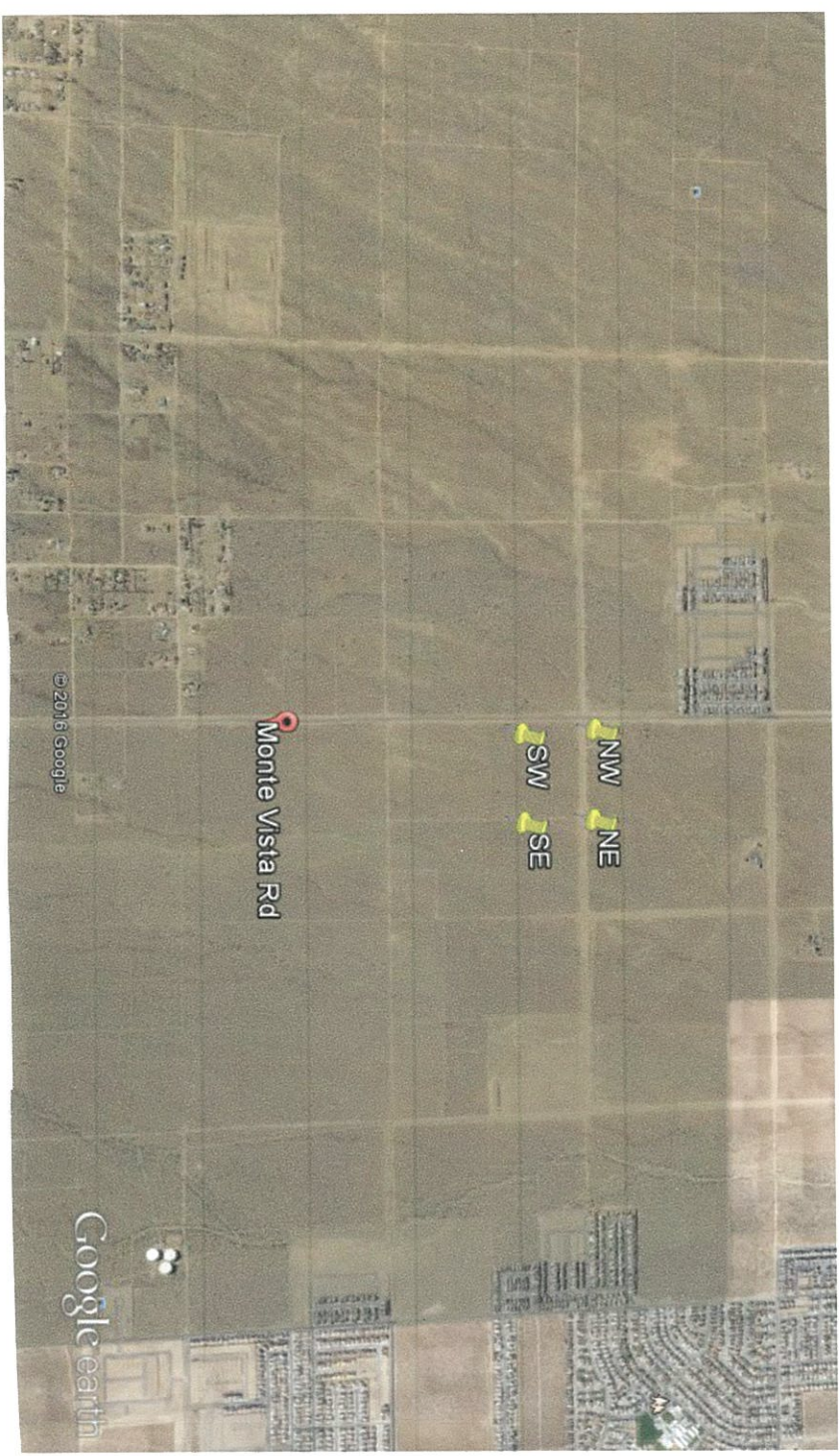


Figure Two Somerset Project Boundaries



Figure Three MGS Trapping Grid Corner Locations





**APPENDIX A  
CDFW MGS MOU**



State of California - The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
Wildlife Branch  
Nongame Wildlife Program  
1812 9<sup>th</sup> Street  
Sacramento, CA 95811  
<http://www.dfg.ca.gov>

EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



Expiration Date: August 9, 2016

**Attachment to Scientific Collecting Permit for  
Philippe J. Vergne (SC-002835)  
ENVIRA**

**Research on Threatened and Endangered Mammals and  
Mammal Species of Special Concern in Southern California  
September 26, 2012**

This letter permit, along with your Scientific Collecting Permit (SCP), meets the requirement of a Memorandum of Understanding (MOU), and specifically authorizes you to conduct work with the list of mammals below (hereinafter collectively referred to as 'authorized mammals'):

Stephens' kangaroo rat (*Dipodomys stephensi*); San Bernardino kangaroo rat (*D. merriami parvus*); (hereinafter referred to as 'kangaroo rats');

Palm Springs pocket mouse (*Perognathus longimembris bangsi*); Los Angeles pocket mouse (*P. l. brevinasus*); Dulzura pocket mouse (*Chaetodipus californicus femoralis*); northwestern San Diego pocket mouse (*C. fallax fallax*); Jacumba pocket mouse (*P. l. internationalis*); white-eared pocket mouse (*P. alticolus alticolus*); (hereinafter referred to as 'pocket mice');

San Diego desert woodrat (*Neotoma lepida intermedia*) (hereinafter referred to as 'woodrat');

Palm Spring round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*); and Mohave ground squirrel (*Xerospermophilus mohavensis*) (hereinafter referred to as 'squirrels').

You are authorized to:

- a) set live traps of at least 12 inches in length to attempt to catch kangaroo rats, the woodrat, or squirrels, or at least 9 inches in length to attempt to catch pocket mice;
- b) handle the captured authorized mammals for the purpose of identifying, aging, sexing, and taking standard measurements;
- c) mark kangaroo rats with ear tag on one ear only;
- d) mark Stephen's kangaroo rat with transponder tags (PIT) applied subcutaneously; and
- e) mark kangaroo rats with non-toxic black ink or dye on the ventral surface or by hair clipping.

Prior to conducting marking (authorizations c, d, and e) on any species other than the kangaroo rats, you must receive additional written authorization via the SCP Amendment process.

All Special Terms and Conditions of the U.S. Fish and Wildlife Service (Service) recovery permit TE-068072-3 or later (federal permit), pertaining to the federally listed species, also are, by this reference, conditions of this letter permit. You shall obtain and maintain during the term of this letter permit any federal permit(s) required to conduct the activities authorized herein. Although the provisions of the federal permit and this letter permit may vary, the more restrictive conditions prevail. You shall follow the Department's Mohave Ground Squirrel Survey Guidelines, January 2003, while conducting work with the squirrels (attached). The above-referenced protocol for visual and trapping surveys may be modified with the written approval of a regional Department staff person and your Department contact.

7-28-2016

**Mohave Ground Squirrel (MGS) Survey and Trapping Form (photocopy as needed)**

**PART I - PROJECT INFORMATION** (use a separate form for each sampling grid)

Project name: SOMERSET T17 16805 Property owner: UNK.

Location: Township 5N; Range 5W; Section 29; 1/4 Section NW

Quad map/series: VICTORVILLE UTM coordinates: NW 117-26-4.13/34-29-28.01  
GPS coordinates of trapping-grid corners

Acreage of Project Site: 40.36 Acreage of potential MGS habitat on site: 40.36

Total acreage visually surveyed on project site: 40.36 Date(s): 4-7-2016  
visual surveys

Visual surveys conducted by: PHILIPPE J VERGNE  
names of all persons by date (use back of form, if needed)

Total acres trapped: 22+ ACRES Number of sampling grids: ONE

Trapping conducted by: PHILIPPE J VERGNE  
names of all persons by sampling term and sampling grid (use back of form, if needed)

Dates of sampling term(s): FIRST 4-23 to 27 SECOND 5-15 to 19 THIRD 6-16 to 20 of 2016  
if required if required

**PART II - GENERAL HABITAT DESCRIPTION** (use back of form, if needed)

Vegetation: dominant perennials: \_\_\_\_\_  
other perennials: SEE REPORT  
dominant annuals: \_\_\_\_\_  
other annuals: \_\_\_\_\_

Land forms (mesa, bajada, wash): FLAT MESA LIMITED SMALL WASHES

Soils description: SANDY

Elevation: 3200 Slope: 45%

**PART III - WEATHER** (report measurements in the following categories for each day of visual survey and each day of trapping; using 24-hour clock, indicate time of day that each measurement was made; use a separate blank sheet for each day)

Temperature: AIR minimum and maximum; SOIL minimum and maximum; Cloud Cover: % in AM and % in PM; Wind Speed: in AM and in PM

SEE REPORT

# Mohave Ground Squirrel Report for Somerset Project

---

## APPENDIX B WEATHER DATA

## Mohave Ground Squirrel Report for Somerset Project

---

WEATHER CONDITIONS	Temp. Air Min F.	Temp. Air Max F.	Temp. Soil Min F.	Temp. Soil Max F.	Cloud Cover % AM	Cloud Cover % PM	Wind Min Mph	Wind Max Mph
<b>Session 1</b>								
April 23	51	76	51	78	0	0	5	12
April 24	54	79	56	80.5	0	0	6	11
April 25	52	68	51.5	77.5	0	0	7	14
April 26	51	76	50.5	77.5	0	5	9	12
April 27	52	74	52	76.5	0	0	8	15
<b>Session 2</b>								
May 15	53	76	59	79	0	0	5	8
May 16	49	86	61	87	0	10	9	12
May 17	51	79	62	81	0	10	5	13
May 18	52	87	59	88	0	0	7	16
May 19	57	86	60	88	0	0	8	16
<b>Session 3</b>								
June 16	53	82	59.5	83	0	0	9	15
June 17	54	86	62	89	0	0	6	12
June 18	58	99	61	101	0	0	11	19
June 19	60	106	63	109	0	0	9	11
June 20	70	110	72	111	0	0	10	16

AM and Min. Readings at 06:30  
PM and Max Readings at 16:00

**APPENDIX C  
PHOTOGRAPH LOG**

## SITE PHOTOGRAPHS



Antelope Ground Squirrel Captured on Site



View of sparse Creosote Scrub with Ground Squirrel Burrow

## SITE PHOTOGRAPHS



Joshua Tree on Site with Raven's Nest



Night Lizard at Base of Joshua Tree on Site



**APPENDIX D  
PLANT SPECIES OBSERVED WITHIN THE STUDY AREA**

## APPENDIX D

## PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

Scientific name	Common name
<i>Yucca brevifolia</i>	Joshua tree
<i>Larrea tridentata</i>	Creosote bush
<i>Ephedra nevadensis</i>	Mormon tea
<i>Acamptopappus sphaerocephalus</i>	Disk goldenhead
<i>Ambrosia dumosa</i>	Burrobush
<i>Chaenactis fremontii</i>	Fremont's pincushion
<i>Hymenoclea salsola</i>	Cheesebush
<i>Lasthenia gracilis</i>	Desert goldfields
<i>Layia glandulosa</i>	White tidy tips
<i>Malacothrix glabrata</i>	Desert dandelion
<i>Stylocline</i> sp.	Neststraw
<i>Amsinckia tessellata</i>	Desert fiddleneck
<i>Pectocarya linearis</i>	Pectocarya
<i>Descurainia pinnata</i>	Desert tansy mustard
* <i>Sisymbrium altissimum</i>	Tumble mustard
<i>Opuntia echinocarpa</i>	Silver cholla
<i>Kraschenimikovia lanata</i>	Winterfat
<i>Salsola tragus</i>	Russian thistle
<i>Erodium cicutarium</i>	Red-stemmed filaree
<i>Camissonia campestris</i>	Mojave sun cup
<i>Linanthus parryae</i>	Sand blossoms

**APPENDIX E**  
**WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA**

## APPENDIX E

## WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA

Scientific name	Common name
<b>Reptiles</b>	
<i>Uta stansburiana</i>	Side-blotched Lizard
<i>Aspidoscelis tigris tigris</i>	Basin whiptail
<b>Birds</b>	
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Campylorhynchus brunneicapillus</i>	Cactus Wren
<i>Carpodacus mexicanus</i>	House Finch
<i>Corvus corax</i>	Common Raven
<i>Eremophila alpestris</i>	Horned Lark
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow
<b>Mammals</b>	
<i>Ammospermophilus leucurus</i>	White-tailed Antelope Squirrel
<i>Dipodomys merriami</i>	Merriam's Kangaroo rat