

Southern California Herpetofaunal Research
and Monitoring (1995-1999):

Application to Natural Community
Conservation Planning

Robert Fisher, Ph.D.

And

Ted Case, Ph.D.





Robert Fisher, Ph.D

Research Biologist
Western Ecological Research Center,
San Diego Field Station
Department of Biology
San Diego State University
San Diego, CA 92182-4614

Ted Case, Ph.D

Professor
Department of Biology
University of California, San Diego
La Jolla, CA 92093-0116





Acknowledgements to: Chris Brown, Carlton Rochester, Ed Ervin, Adam Backlin, Drew Stokes, Milan Mitrovich, Anita Burkett, Alan Bate, Gina Castro, Kevin Crooks, Andrew Fisher, Meredith Hardy, Stacy Hathaway, Robb Hirsch, Rob Lovich, Melanie Madden, Manna Warburton, Dustin Wood, Chris Haas, Kevin Ernst, Bob Haas, and all of the others who have contributed to the project.

Production assistance by Chris Brown and Carlton Rochester.

Sponsors

California Department of Fish and Game, US Geological Survey, US Fish and Wildlife Service, Eastern Metropolitan Water District, California State Park, The Nature Conservancy, National Park Service, Canon USA, Wildlife Corridor Conservation Authority, NAFTA, Orange County Harbors, Beachs and Parks, Nature Reserve of Orange County, US Forest Service, Department of Defense (SERDP), Bureau of Land Management, University of California, Irvine, Marine Corps Base Camp Pendleton, San Diego State University, SDSU-Field Stations, University of California, San Diego, City of San Diego, National Park Foundation.

Partners

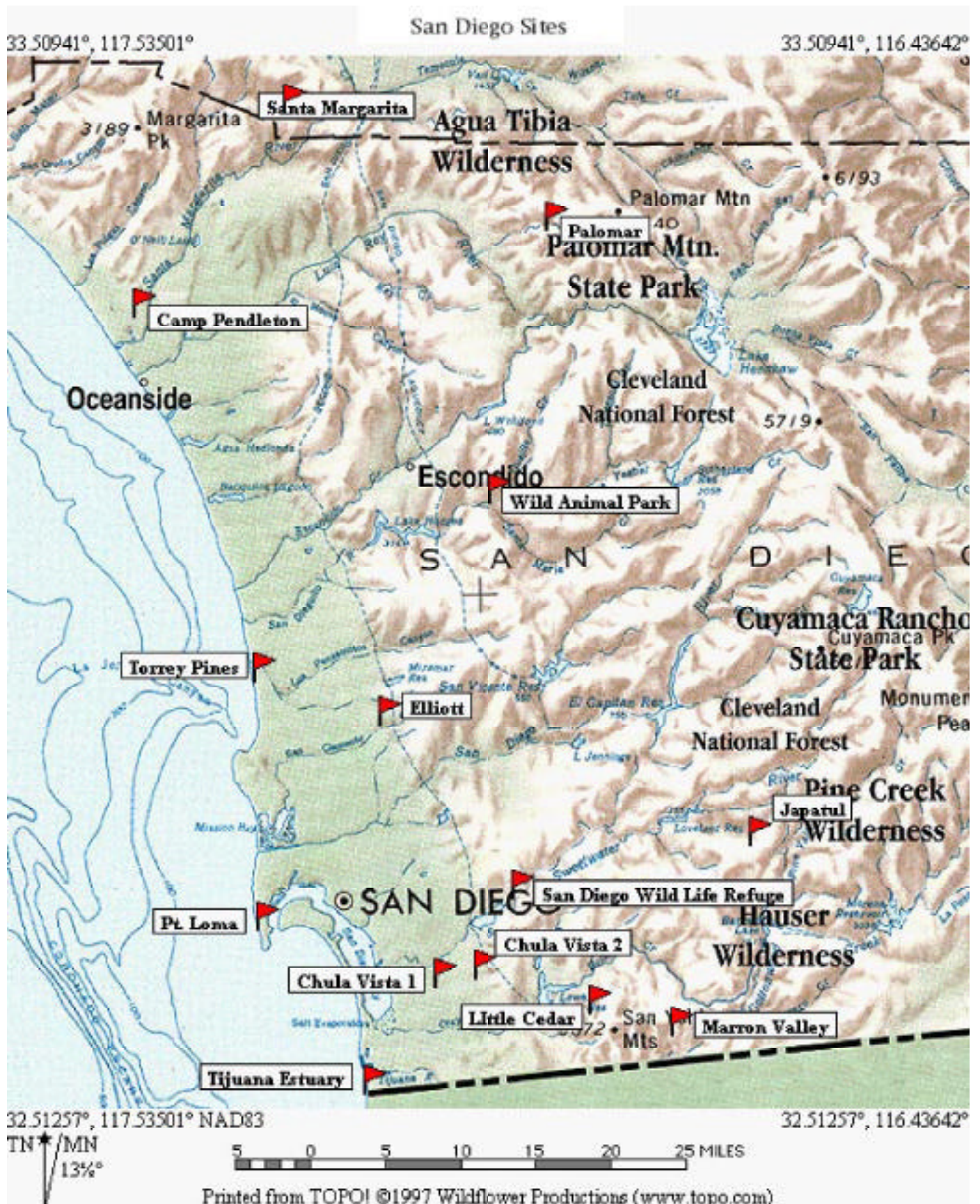
California State Parks, National Wildlife Refuges, Bureau of Land Management, University of California--Natural Reserve System, San Diego State University, UC San Diego, National Parks Foundation, Cabrillo National Monument, Mission Trails Regional Park, Zoological Society of San Diego--Wild Animal Park, MCB Camp Pendleton, US Forest Service, Riverside County Habitat Authority, The Nature Conservancy, Eastern Metropolitan Water District, National Audobon Society, The Irvine Company, Southern California Edison, Orange County Harbors, Beachs and Parks, Department of Defense, City of Chula Vista, City of San Diego, Greg Pregill, .



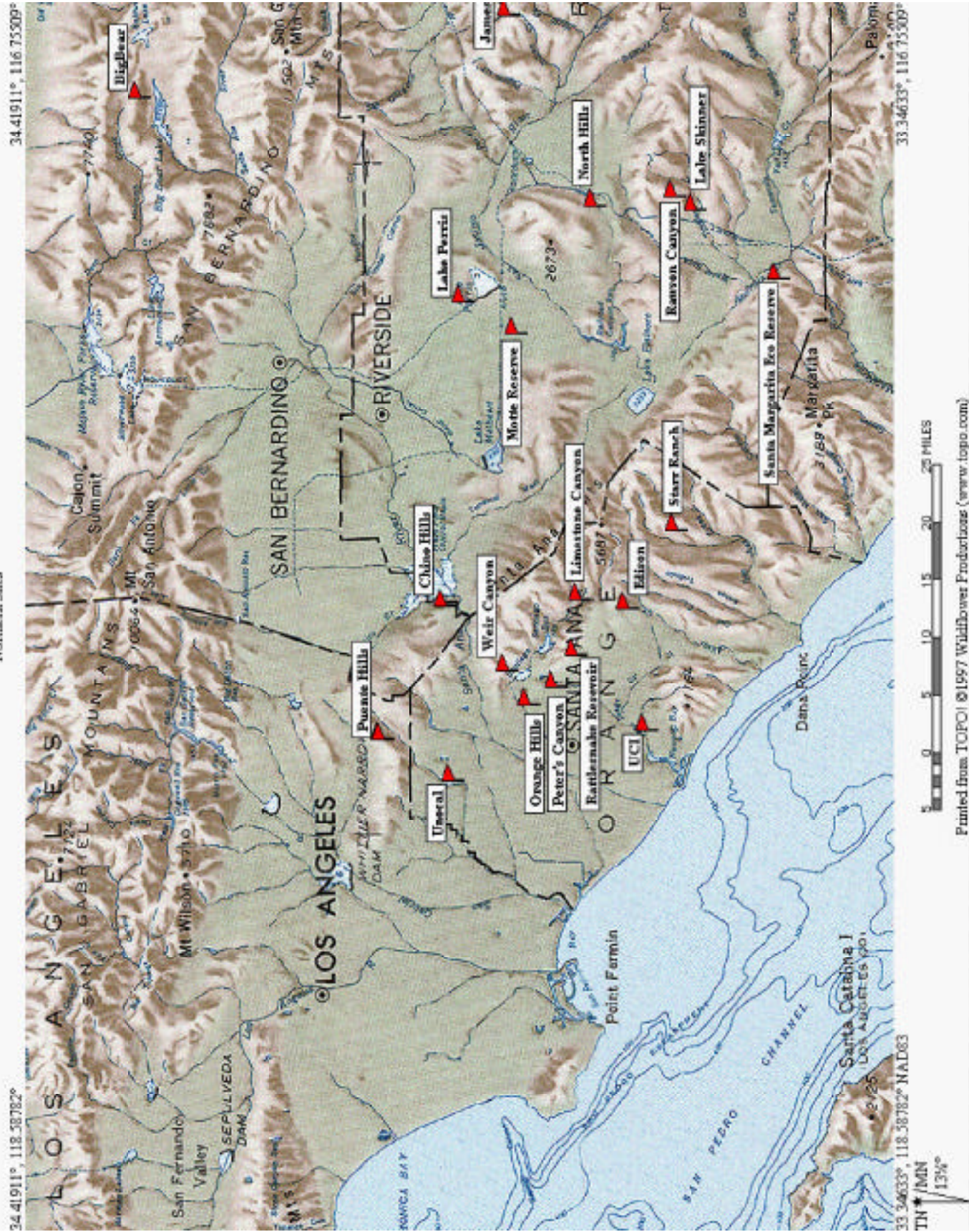
San Diego Sites Map				
Northern Sites Map				
Species Captures by Array for Coastal Sites Table				
Desert Sites Map				
Species Captures by Array for Desert Sites Table				
San Diego County				
Camp Pendleton			San Diego National Wildlife Refuge	
Site Description			Site Description	
Site Map			Site Map	
Arrays #1-2			Species Captures by Array	
Arrays #3-4			Tijuana Estuary National Wildlife Refuge	
Arrays #5-8			Site Description	
Arrays #9-10			Site Map	
Arrays #11-12			Species Captures by Array	
Arrays #13-15			Torrey Pines I	
Arrays #16-20			Site Description	
Arrays #21-24			Site Map	
Arrays #25-26			Species Captures by Array	
Arrays #27-30			Torrey Pines II	
Species Captures by Array			Site Description	
Chula Vista I			Site Map	
Site Description			Species Captures by Array	
Site Map			Torrery Pines III	
Species Captures by Array			Site Description	
Chula Vista II			Site Map	
Site Description			Species Captures by Array	
Site Map			New Torrey Pines	
Species Captures by Array			Site Description	
Elliott Reserve			Site Map	
Site Description			Species Captures by Array	
Site Map			Wild Animal Park	
Species Captures by Array			Site Description	
Japatul			Site Map	
Site Description			Species Captures by Array	
Site Map				
Species Captures by Array				
Little Cedar Ridge				
Site Description				
Site Map				
Species Captures by Array				
Marron Valley				
Site Description				
Site Map				
Marron Valley				
Marron Valley -Cattle Pond				
Species Captures by Array				
Palomar Mountain				
Site Description				
Site Map				
Species Captures by Array				
Point Loma				
Site Description				
Site Map				
Species Captures by Array				

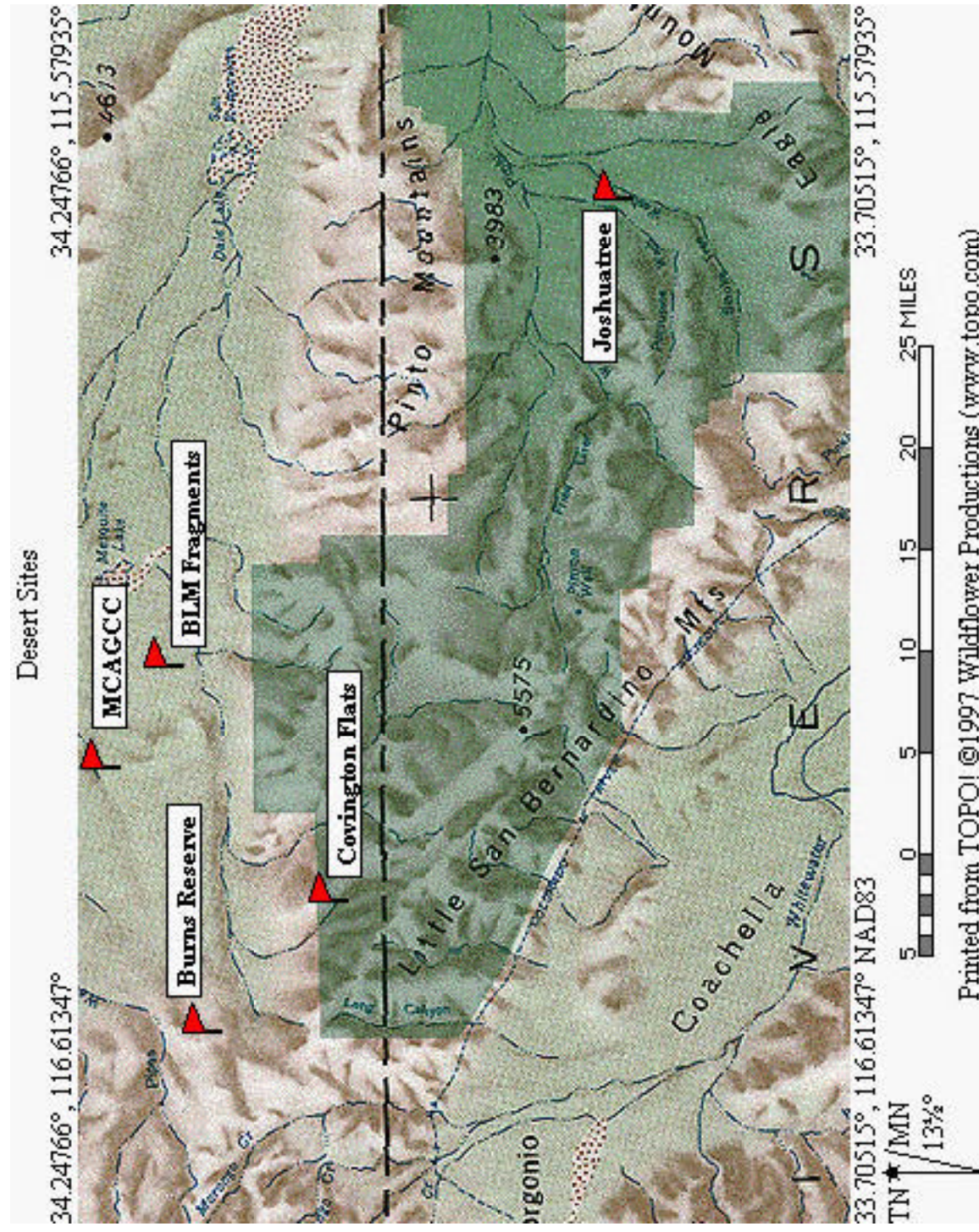
Orange County			Riverside County		
	Edison			James Reserve	
		Site Description			Site Description
		Site Map			Site Map
		Species Captures by Array			Species Captures by Array
	Limestone Canyon			Lake Perris	
		Site Description			Site Description
		Site Map			Site Map
		Species Captures by Array			Species Captures by Array
	Orange Hills			Lake Skinner	
		Site Description			Site Description
		Site Map			Site Map
		Species Captures by Array			Species Captures by Array
	Peter's Canyon			Motte Reserve	
		Site Description			Site Description
		Site Map			Site Map
		Species Captures by Array			Species Captures by Array
	Puente Canyon			North Hills	
		Site Description			Site Description
		Site Map			Site Map
		Arrays #1-4			Species Captures by Array
		Arrays #5-7			
		Arrays #8-11			
		Arrays #12-19			
		Species Captures by Array			Species Captures by Array
	Rattlesnake Reservoir			Santa Margarita Ecological Reserve	
		Site Description			Site Description
		Site Map			Site Map
		Species Captures by Array			Species Captures by Array
	Starr Ranch				
		Site Description			
		Site Map			
		Species Captures by Array			
	UC Irvine				
		Site Description			
		Site Map			
		Species Captures by Array			
	Unocal				
		Site Description			
		Site Map			
		Species Captures by Array			
	Weir Canyon				
		Site Description			
		Site Map			
		Species Captures by Array			

San Bernardino County					
	BigBear				
		Site Description			
		Site Map			
		Species Captures by Array			
	Chino Hills				
		Site Description			
		Site Map			
		Golf Course Arrays			
		Telegraph Canyon Arrays			
		Carbon Canyon Arrays			
		Species Captures by Array			
Desert					
	BLM Fragments				
		Site Description			
		Site Map			
		Arrays #1-9			
		Array #10			
		Species Captures by Array			
	Burns Reserve				
		Site Description			
		Site Map			
		Species Captures by Array			
	Covington Flats				
		Site Description			
		Site Map			
		Arrays #1-4			
		Arrays #5-12			
		Species Captures by Array			
	Joshua Tree				
		Site Description			
		Site Map			
		Arrays #1-5			
		Arrays #6-10			
		Arrays #11-14			
		Arrays #15-19			
		Species Captures by Array			
	MCAGCC				
		Site Description			
		Site Map			
		Species Captures by Array			



Northern Sites

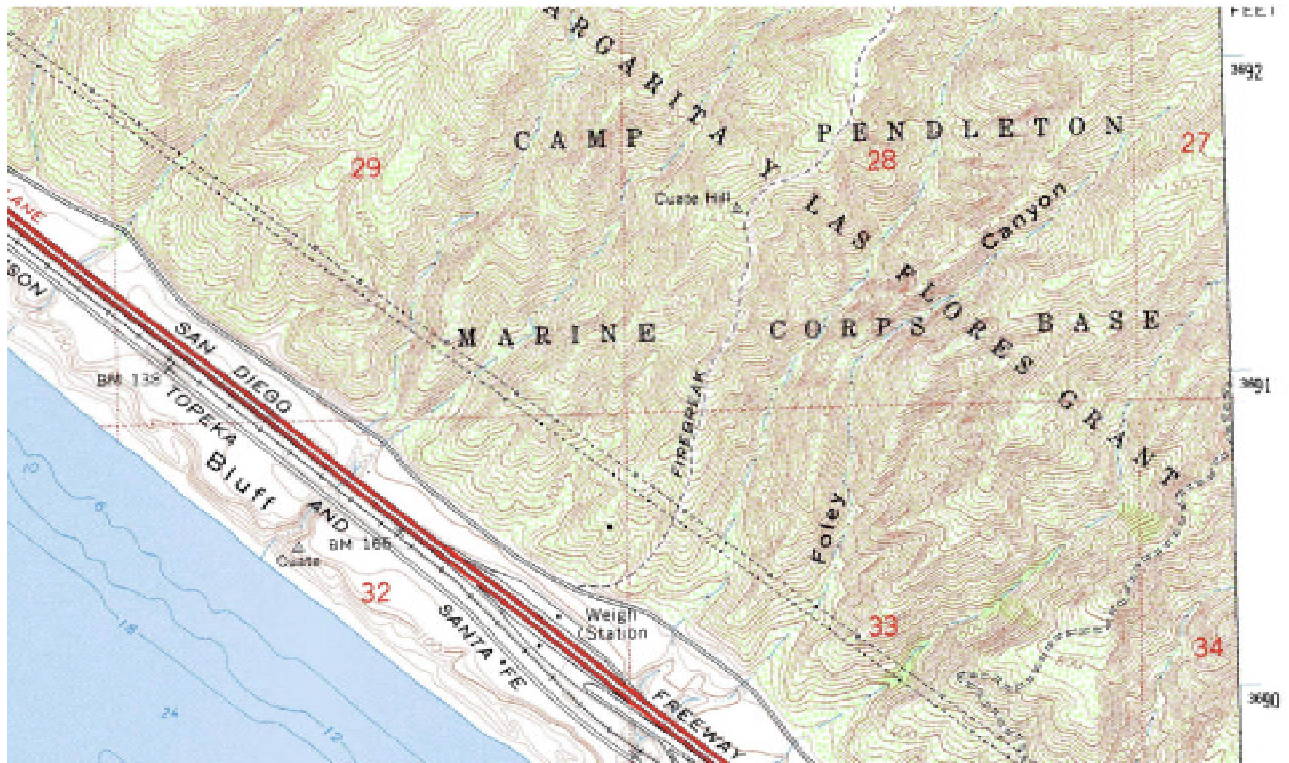




Common Name	Scientific Name	ELM Fragments	Burns Reserve	Covingtons Flats	Joshua tree	MCAGCC	NUM. OF INDIVIDUALS	NUM. OF SITES
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>						0	0
Western Toad	<i>Bufo boreas</i>						0	0
Arroyo Toad	<i>Bufo microscaphus</i>						0	0
Red-Spotted Toad	<i>Bufo punctatus</i>						0	0
California Treefrog	<i>Hyla cadaverina</i>						0	0
Pacific Treefrog	<i>Hyla regilla</i>						0	0
California Legless Lizard	<i>Anniella pulchra</i>						0	0
Zebra-tailed Lizard	<i>Callisaurus draconoides</i>	1			21	3	25	3
Western Whiptail	<i>Cnemidophorus tigris</i>	229	25	22	256	266	798	5
Western Banded Gecko	<i>Coleonyx variegatus</i>	6	1		3	14	24	4
Great Basin Collard Lizard	<i>Crotaphytus bicinctores</i>						0	0
Desert Iguana	<i>Dipsosaurus dorsalis</i>	41			10	7	58	3
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>						0	0
Gilbert Skink	<i>Eumeces gilberti</i>		1	10	5		16	3
Western Skink	<i>Eumeces skiltonianus</i>						0	0
Long-nosed Leopard Lizard	<i>Gambelia wislizenii</i>					1	1	1
Coast Horned Lizard	<i>Phrynosoma coronatum</i>			10			10	1
Desert Horned Lizard	<i>Phrynosoma platyrhinos</i>	2			1	12	15	3
Chuckwalla	<i>Sauromalus obesus</i>						0	0
Desert Spiny Lizard	<i>Sceloporus magister</i>			1	24	5	30	3
Western Fence Lizard	<i>Sceloporus occidentalis</i>		7	14	7		28	3
Mojave Fringe-toed Lizard	<i>Uma scoparia</i>						0	0
Long-tailed Brush Lizard	<i>Urosaurus graciosus</i>				2		2	1
Side-Blotched Lizard	<i>Uta stansburiana</i>	22	30	112	155	20	339	5
Desert Night Lizard	<i>Xantusia vigilis</i>		1	4	15		20	3
Glossy Snake	<i>Arizona elegans</i>	2			3	1	6	3
Western Shovel-nosed Snake	<i>Chionactis occipitalis</i>	2			1	9	12	3
Western Diamondback Rattlesnake	<i>Crotalus atrox</i>						0	0
Sidewinder	<i>Crotalus cerastes</i>	2			2	1	5	3
Speckled Rattlesnake	<i>Crotalus mitchellii</i>			1	1		2	2
Mojave Rattlesnake	<i>Crotalus scutulatus</i>					1	1	1
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>			2			2	1
Western Ringneck Snake	<i>Diadophis punctatus</i>						0	0
Night Snake	<i>Hypsiglena torquata</i>						0	0
California Kingsnake	<i>Lampropeltis getulus</i>					1	1	1
Western Blind Snake	<i>Leptotyphlops humilis</i>				2		2	1
Rosy Boa	<i>Charina trivirgata</i>						0	0
Coachwhip/Red Racer	<i>Masticophis flagellum</i>	3	1	2	12	10	28	5
Striped Racer	<i>Masticophis lateralis</i>			5			5	1
Spotted Leaf-nosed Snake	<i>Phyllorhynchus decurtatus</i>	1				3	4	2
San Diego Gopher Snake	<i>Pituophis melanoleucas</i>			5		2	7	2
Long-nosed Snake	<i>Rhinocheilus lecontei</i>	2		1	1		4	3
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>			1	4		5	2
Southwestern Black-headed Snake	<i>Tantilla hobartsmithi</i>			2			2	1
Lyre Snake	<i>Trimorphodon biscutatus</i>						0	0
	Number of Individuals	313	66	192	527	356	1454	5
	Number of Species	12	7	15	19	16	28	0

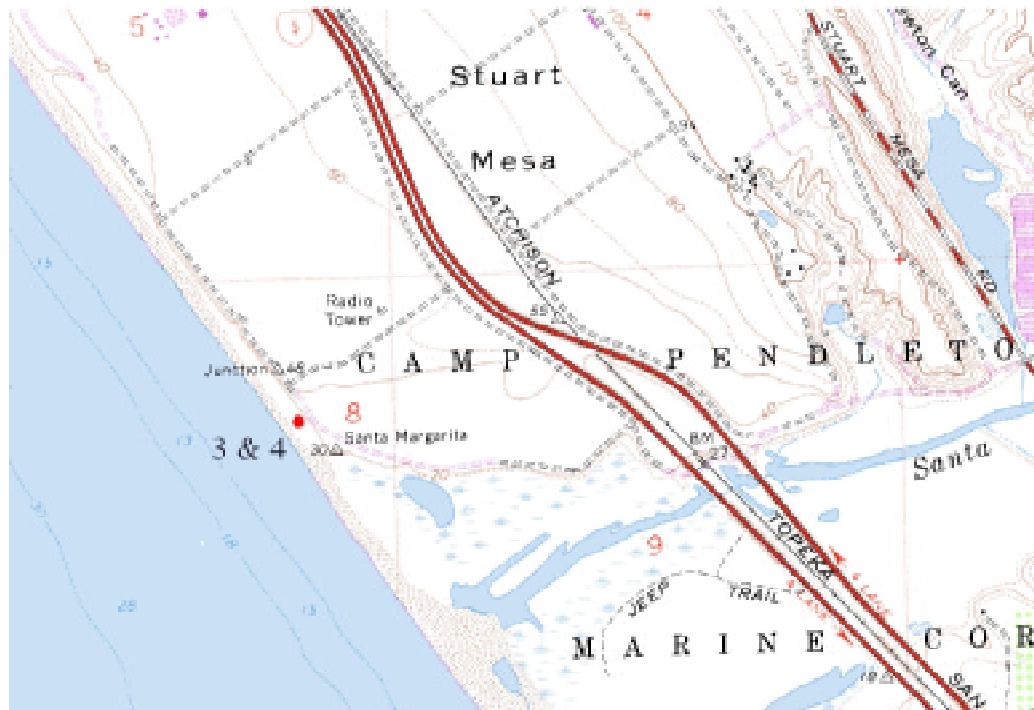
Site Name:	Camp Pendleton				
County:	San Diego				
Responsible Parties:	Camp Pendleton Marine Corps Base				
Contact:	Chris Bandy				
Phone:	(760)725-9730				
Description: Elevation 0 - 640 meters. The arrays at this site are spread over a large area, and cover a large variety of habitats as well. These range from coastal dunes and mesas to oak woodland and wash bottom. Disturbance at the arrays varies from one to the next. Some have little disturbance, and others are in areas used by the military on a regular bases for training exercises. Camp Pendleton functions as a Large Coastal Core Site.					
Start dates for Sample Periods:					
	12/14/96	2/11/97	9/28/98	2/3/99	
		4/15/97	11/11/98	3/24/99	
		6/16/97		4/20/99	
		8/1/97		6/1/99	
		10/7/97		7/7/99	
		12/8/97		9/8/99	
				9/15/99	
Number of Sample Days:	120			11/10/99	
Location:					
Array	Lat. (N) dec.	Lon. (W) dec.	Datum		
1	33.34489	117.50877	NAD83		
2	33.34506	117.50846	NAD83		
3	33.23683	117.42044	NAD83		
4	33.23741	117.42082	NAD83		
5	33.31788	117.46855	NAD83		
6	33.31844	117.46905	NAD83		
7	33.32595	117.49257	NAD83		
8	33.32626	117.49208	NAD83		
9	33.38985	117.56261	NAD83		
10	33.39010	117.56247	NAD83		
11	33.38985	117.56262	NAD83		
12	33.39058	117.56293	NAD83		
13	33.46888	117.47929	NAD83		
14	33.46835	117.47966	NAD83		
15	33.46905	117.48004	NAD83		
16	33.34352	117.36357	NAD83		
17	33.34361	117.36377	NAD83		
18	33.34549	117.37273	NAD83		
19	33.34596	117.37231	NAD83		
20	33.34578	117.37187	NAD83		
21	33.41584	117.37224	NAD83		
22	33.41554	117.37197	NAD83		
23	33.40799	117.36305	NAD83		
24	33.40753	117.36259	NAD83		
25	33.37081	117.34905	NAD83		
26	33.37103	117.34920	NAD83		
27	33.41564	117.31867	NAD83		
28	33.41530	117.31903	NAD83		
29	33.41034	117.29472	NAD83		
30	33.41120	117.29505	NAD83		

Camp Pendleton, Arrays #1-2



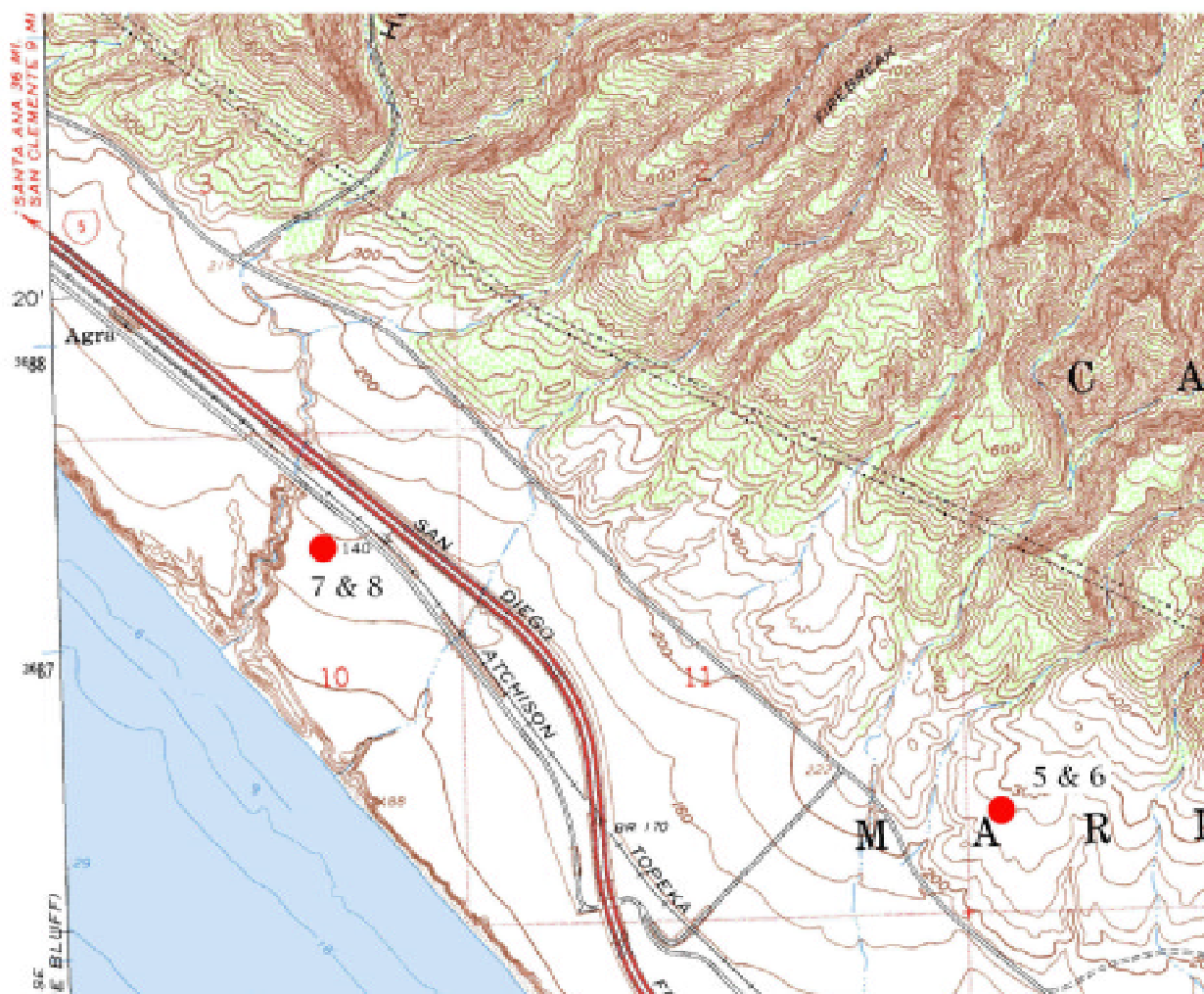
Scale: 1:24,000

Camp Pendelton, Arrays #3-4



Scale: 1:24,000

Camp Pendelton, Arrays #5-8



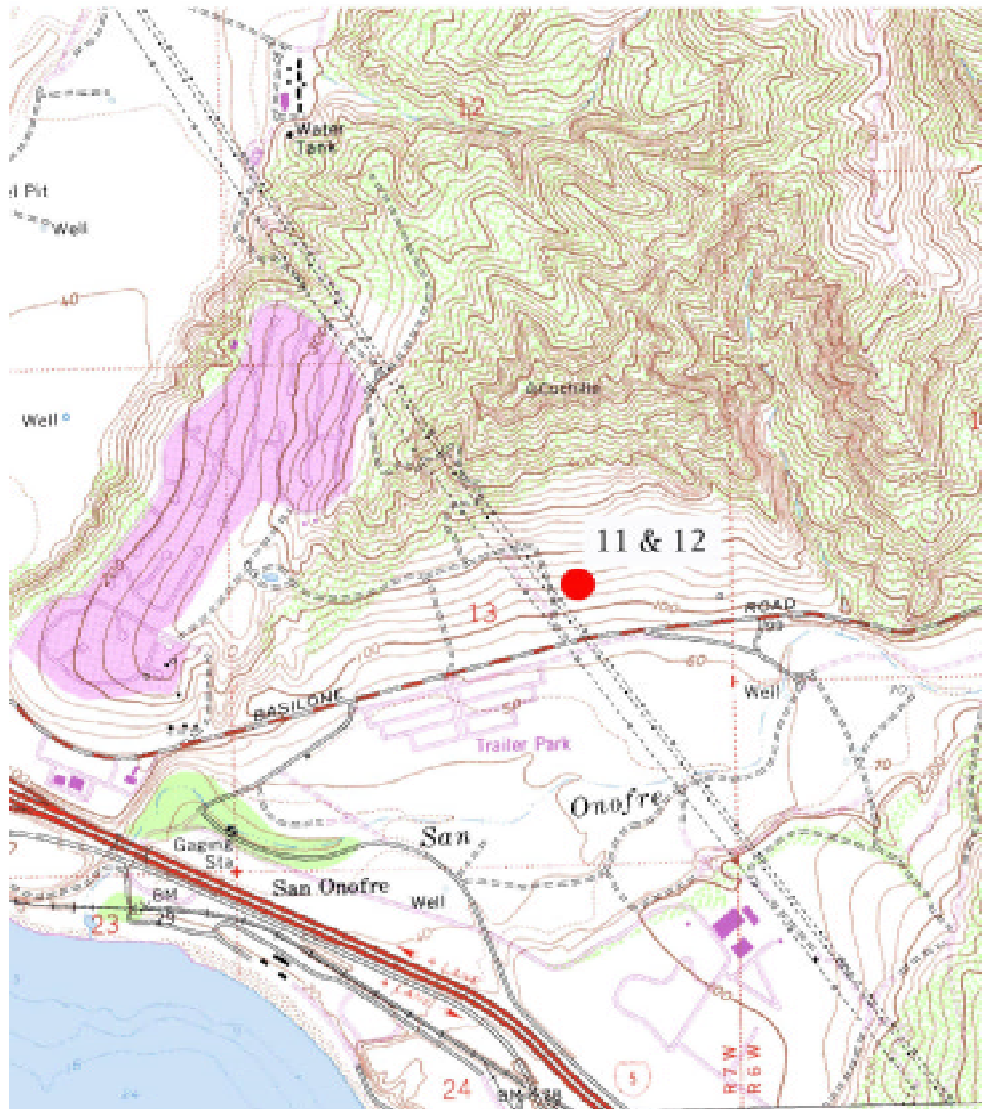
Scale: 1:24,000

Camp Pendelton, Arrays #9-10



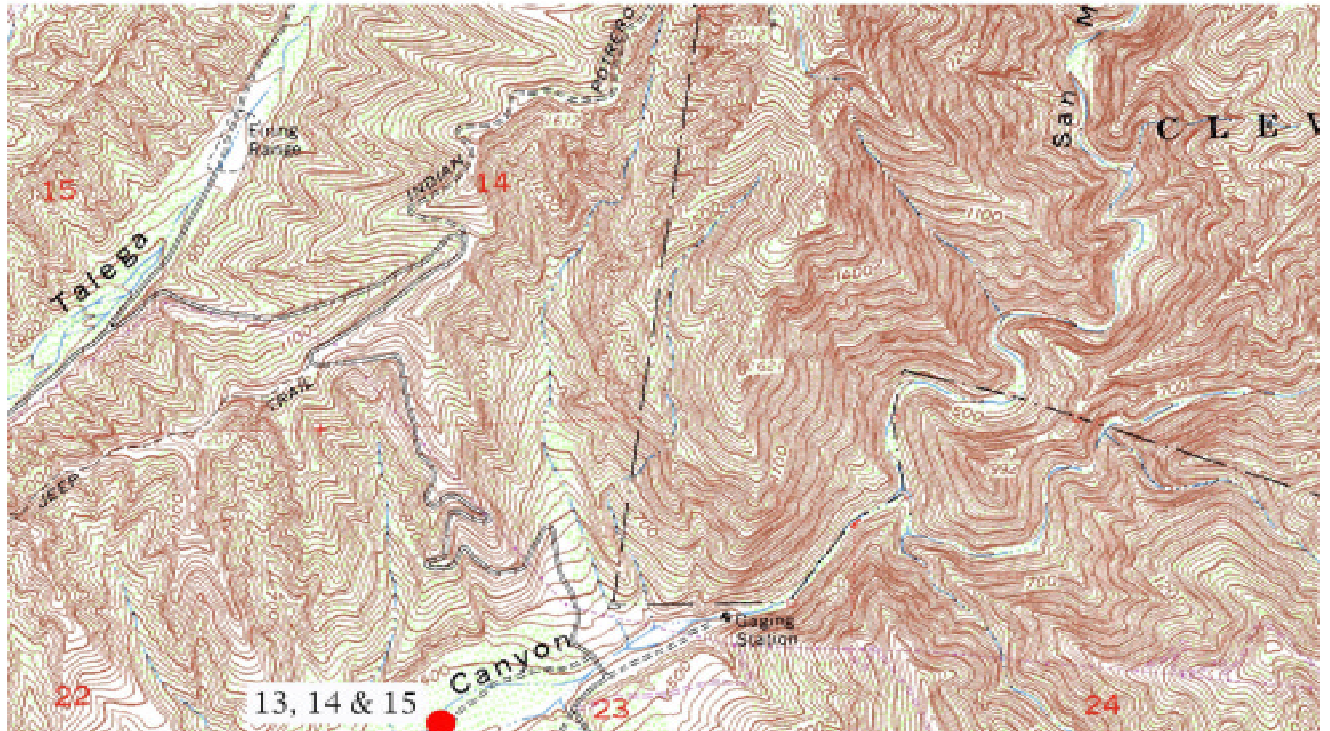
Scale: 1:24,000

Camp Pendelton, Arrays #11-12



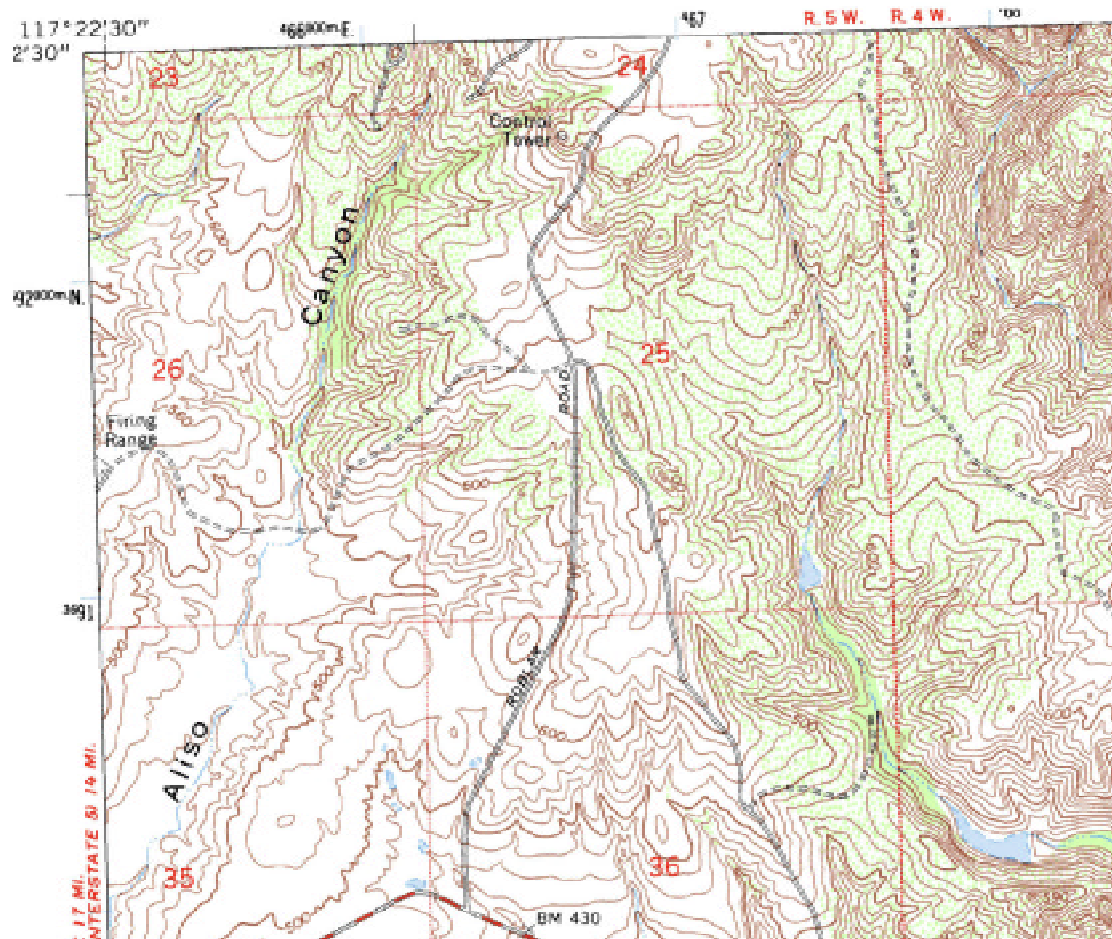
Scale: 1:24,000

Camp Pendelton, Arrays #13-15



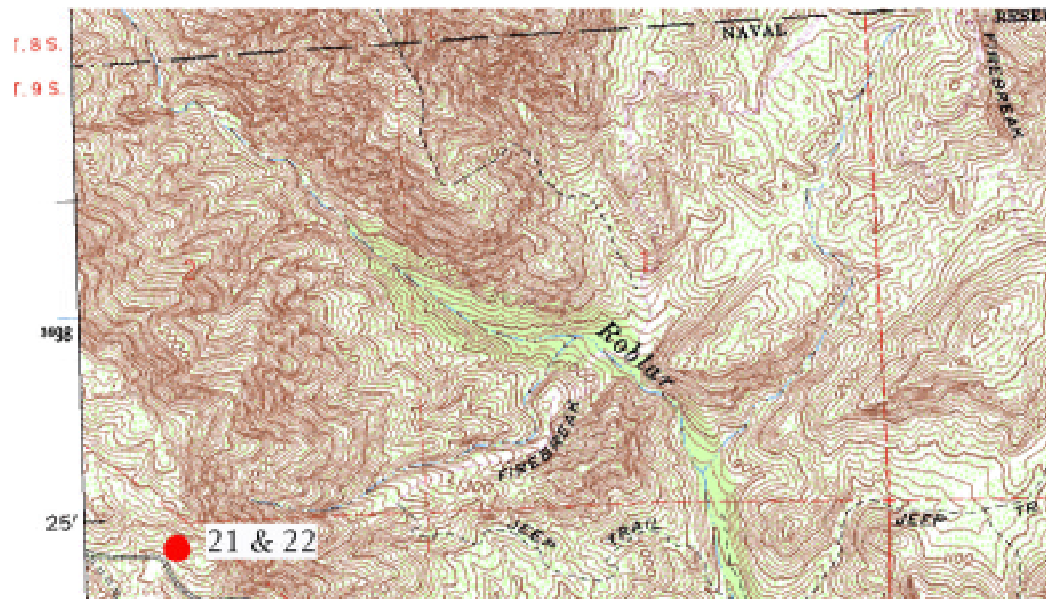
Scale: 1:24,000

Camp Pendelton, Arrays #16-20



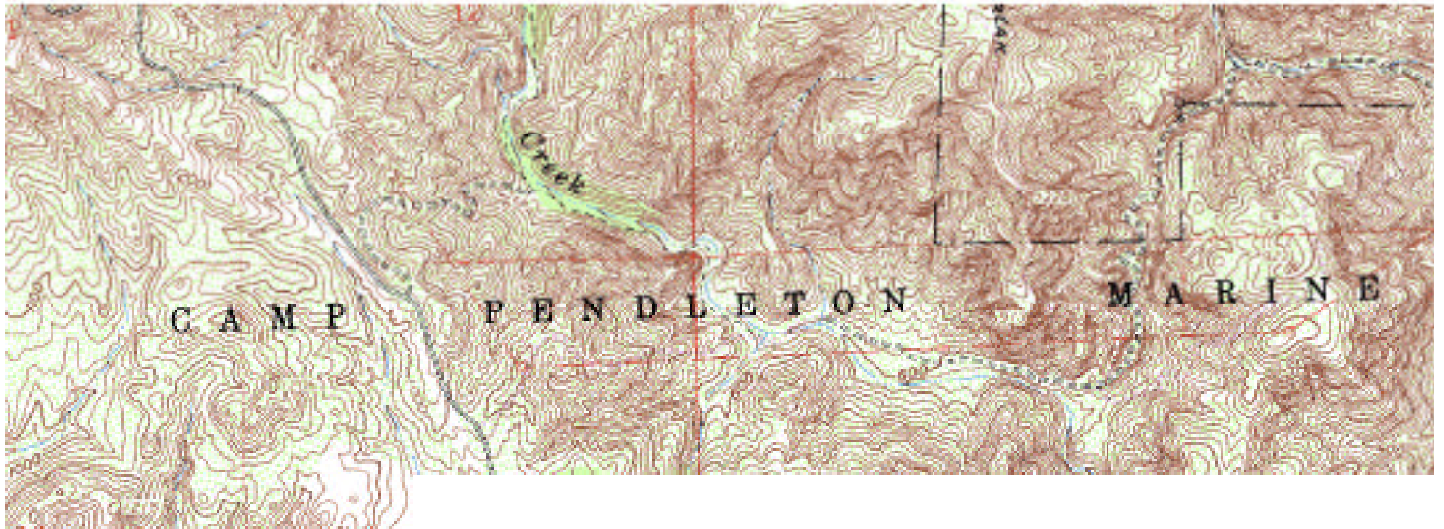
Scale: 1:24,000

Camp Pendelton, Arrays #21-24



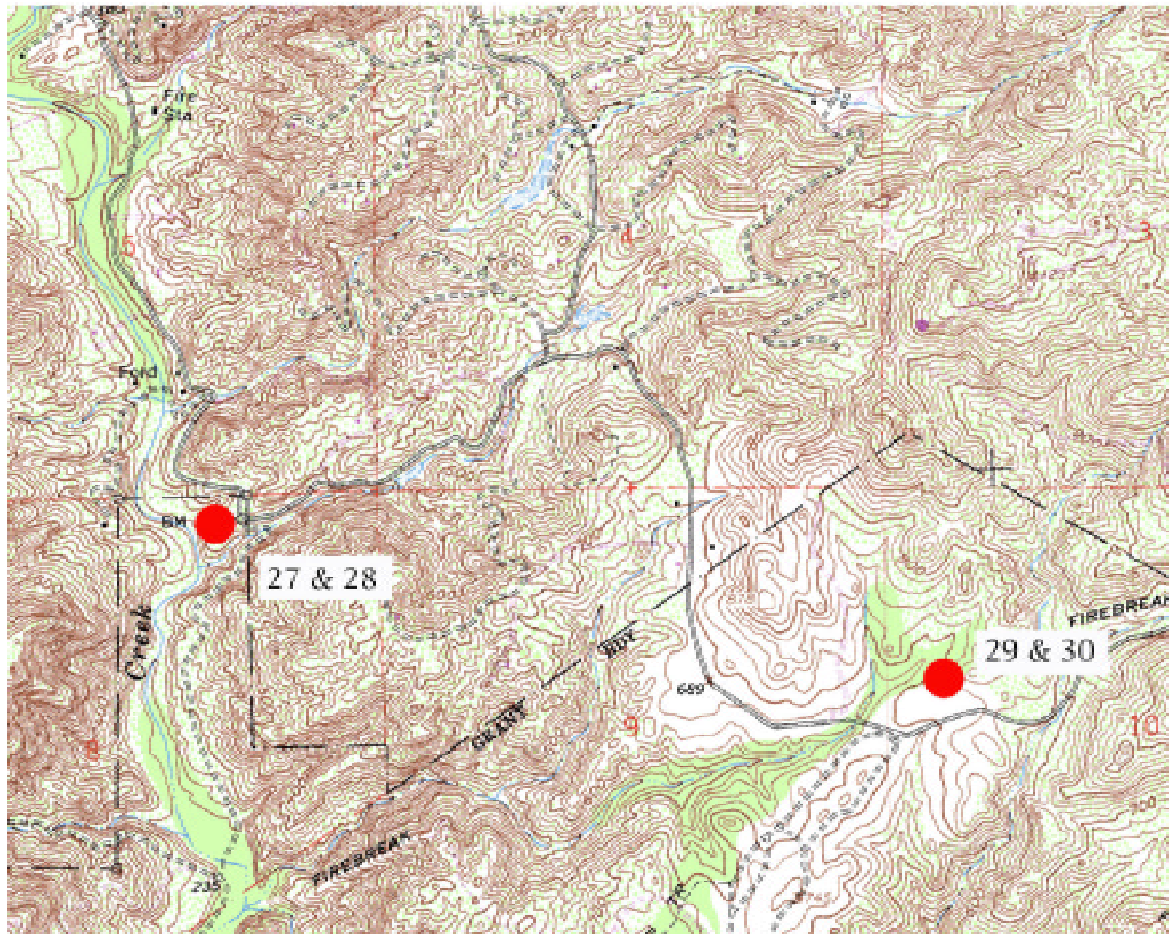
Scale: 1:24,000

Camp Pendelton, Arrays #25-26



Scale: 1:24,000

Camp Pendelton, Arrays #27-30



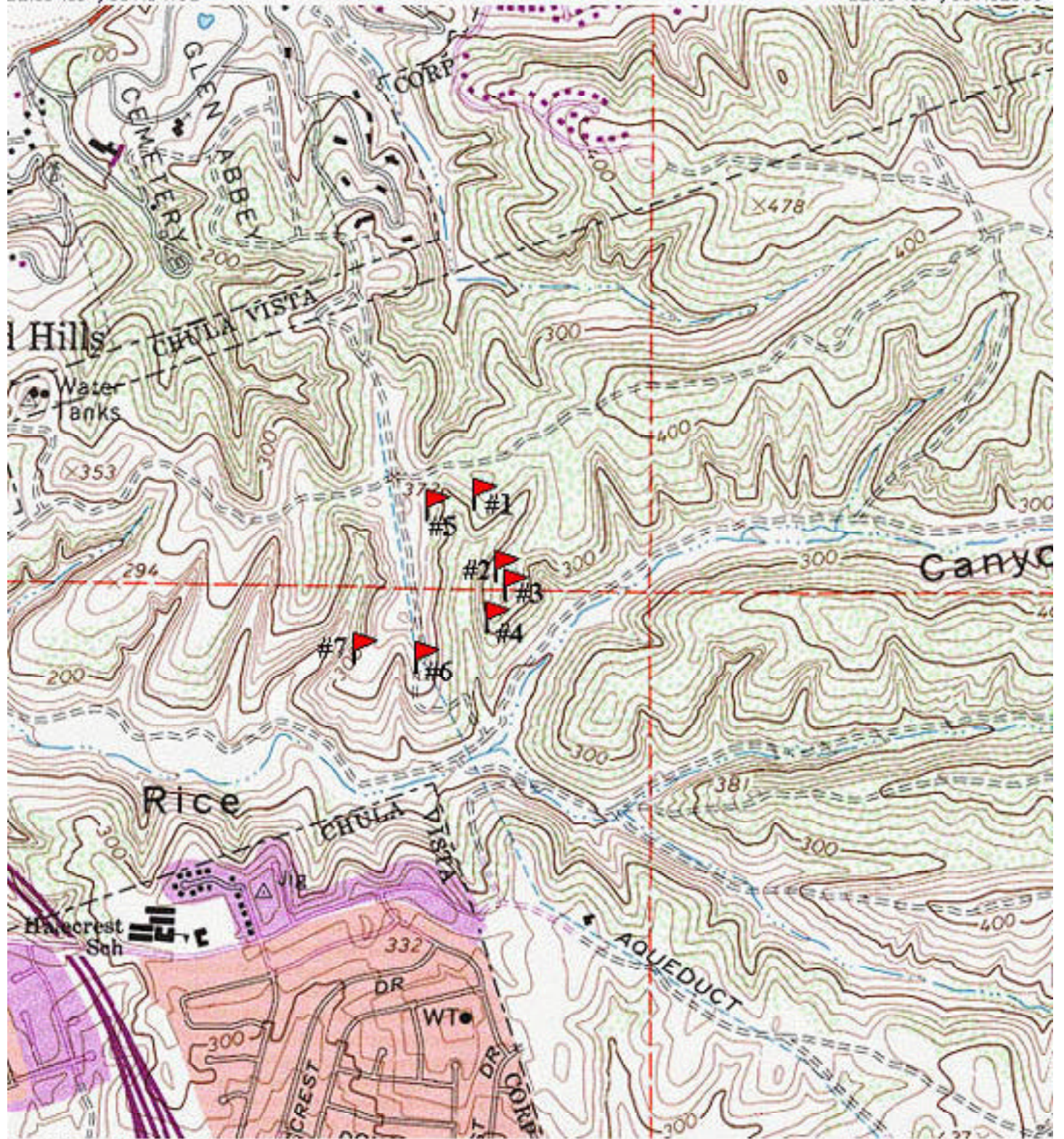
Scale: 1:24,000

[illegible]

Chula Vista I

32.65405°, 117.04753°

32.65405°, 117.02106°



32.63027°, 117.04753° NAD27

32.63027°, 117.02106°

TN * MN
13%



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

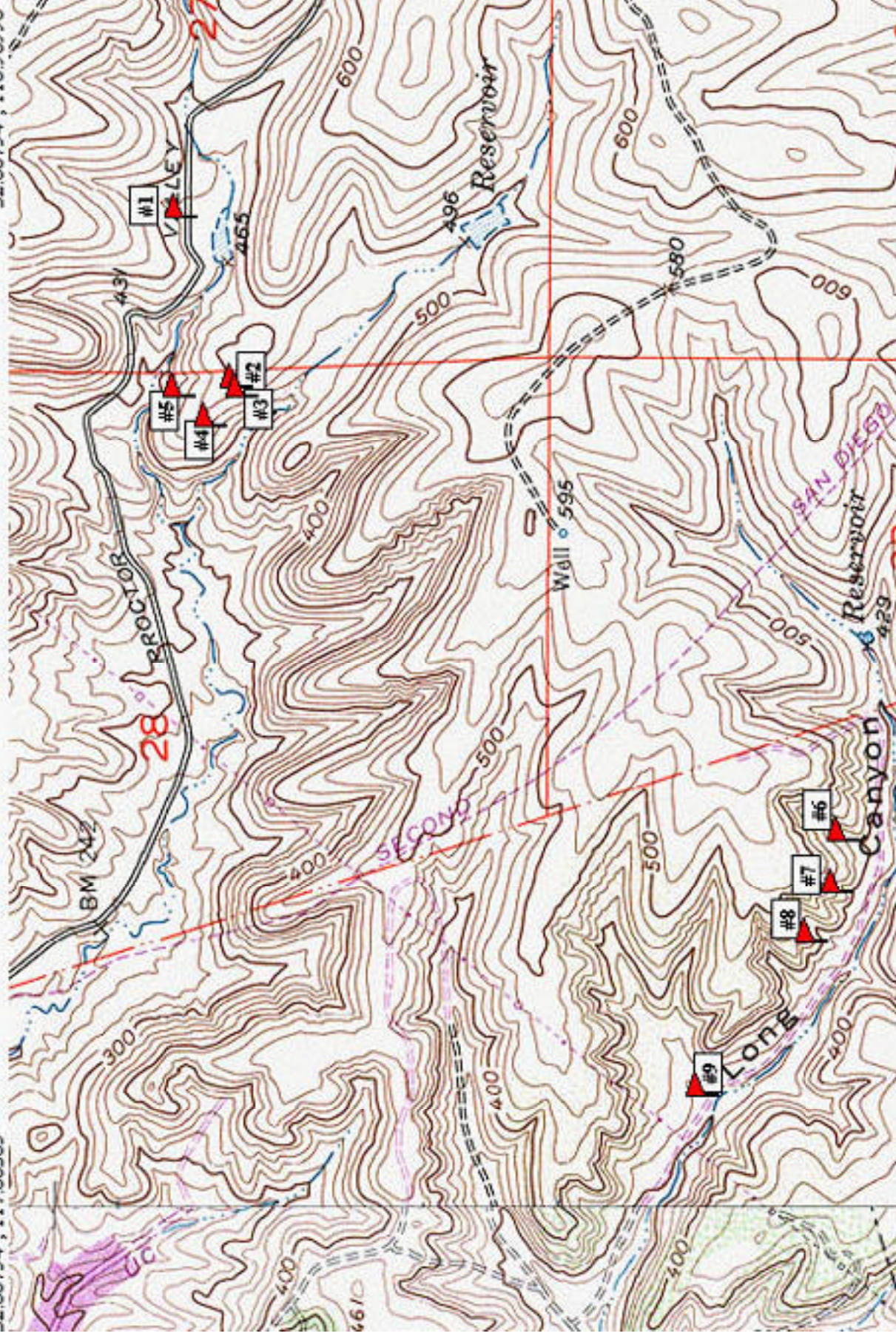
Site: Chula Vista I	Total 23 Sample Periods	Array Number							Total
Common Name	Scientific Name	1	2	3	4	5	6	7	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>								
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>								
Arboreal Salamander	<i>Aneides lugubris</i>								
Monterey Salamander	<i>Ensatina eschscholtzi</i>								
Large-Blotched Salamander	<i>Ensatina klauberi</i>								
California Newt	<i>Taricha torosa</i>								
California Treefrog	<i>Hyla cadaverina</i>								
Pacific Treefrog	<i>Hyla regilla</i>		1	1					2
Western Toad	<i>Bufo boreas</i>								
Arroyo Toad	<i>Bufo microscaphus</i>								
Red-Spotted Toad	<i>Bufo punctatus</i>								
Red-Legged Frog	<i>Rana aurora</i>								
Bullfrog	<i>Rana catesbeiana</i>								
African Clawed Frog	<i>Xenopus laevis</i>								
Western Spadefoot Toad	<i>Spea hammondi</i>								
Western Pond Turtle	<i>Clemmys marmorata</i>								
Slider	<i>Trachemys sp.</i>								
Western Banded Gecko	<i>Coleonyx variegatus</i>								
Granite Night Lizard	<i>Xantusia henshawi</i>								
Desert Night Lizard	<i>Xantusia vigilis</i>								
California Legless Lizard	<i>Anniella pulchra</i>								
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	9	11	2	3	7	7	2	41
Gilbert Skink	<i>Eumeces gilberti</i>								
Western Skink	<i>Eumeces skiltonianus</i>		1				1		2
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	98	26	89	49	85	49	59	455
Western Whiptail	<i>Cnemidophorus tigris</i>								
Desert Spiny Lizard	<i>Sceloporus magister</i>								
Sagebrush Lizard	<i>Sceloporus graciosus</i>								
Western Fence Lizard	<i>Sceloporus occidentalis</i>	36	16	16	21	38	23	22	172
Granite Spiny Lizard	<i>Sceloporus orcutti</i>								
Side-Blotched Lizard	<i>Uta stansburiana</i>	2	3	12	11	7	11	11	57
Coast Horned Lizard	<i>Phrynosoma coronatum</i>								
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>								
Western Blind Snake	<i>Leptotyphlops humilis</i>								
Rosy Boa	<i>Charina trivirgata</i>								
Glossy Snake	<i>Arizona elegans</i>								
Yellow-Bellied Racer	<i>Coluber constrictor</i>								
Western Ringneck Snake	<i>Diadophis punctatus</i>								
Night Snake	<i>Hypsiglena torquata</i>								
California Kingsnake	<i>Lampropeltis getulus</i>			1			2		3
California Mountain Kingsnake	<i>Lampropeltis zonata</i>								
Coachwhip/Red Racer	<i>Masticophis flagellum</i>								
Striped Racer	<i>Masticophis lateralis</i>	4	5	3	5	9	9		35
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1	2	1	1	2		1	8
Long-nosed Snake	<i>Rhinocheilus lecontei</i>	1			1			1	3
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>			1		1			2
California Black-Headed Snake	<i>Tantilla planiceps</i>								
Two-striped Garter Snake	<i>Thamnophis hammondi</i>								
Common Garter Snake	<i>Thamnophis sirtalis</i>								
Lyre Snake	<i>Trimorphodon biscutatus</i>								
Speckled Rattlesnake	<i>Crotalus mitchelli</i>								
Red Diamond Rattlesnake	<i>Crotalus ruber</i>		1	2	1			1	5
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>					2			2
Number of Individuals		151	66	128	92	151	102	97	787
Number of Species		7	9	10	8	8	7	7	13

Site Name:	Chula Vista II																																																																											
County:	San Diego																																																																											
Responsible Parties:	Chula Vista Open Space																																																																											
Contact:	Joel Chew	Joel Chew																																																																										
Phone:	(619)691-5071																																																																											
<p>Description: Elevation 87-158 meters. This site is composed of three different sized fragments. The first, Bonita Long Canyon, has very good maritime succulent scrub, with array coverage of 16 hectares. The second, Salt Creek I, has good coastal sage scrub, arrays covering 12 hectares. And the third, Otay Tar plant preserve, is mostly grassland at only 0.4 hectares. These three fragments are currently bordered by houses. The majority of the slopes are south facing, and the impacts from people minimal. The fragments are within the MSCP planning area.</p>																																																																												
<p>Start dates for Sample Periods:</p> <table border="1"> <tr> <td>9/12/95</td> <td>2/20/96</td> <td>1/28/97</td> <td>3/10/98</td> <td>2/17/99</td> </tr> <tr> <td>11/13/95</td> <td>4/23/96</td> <td>4/1/97</td> <td>5/13/98</td> <td>4/15/99</td> </tr> <tr> <td></td> <td>6/24/96</td> <td>6/3/97</td> <td>7/14/98</td> <td>7/7/99</td> </tr> <tr> <td></td> <td>8/27/96</td> <td>8/5/97</td> <td>9/15/98</td> <td>9/8/99</td> </tr> <tr> <td></td> <td>11/1/96</td> <td>10/7/97</td> <td>11/16/98</td> <td>11/15/99</td> </tr> <tr> <td></td> <td></td> <td>12/9/97</td> <td></td> <td></td> </tr> </table>							9/12/95	2/20/96	1/28/97	3/10/98	2/17/99	11/13/95	4/23/96	4/1/97	5/13/98	4/15/99		6/24/96	6/3/97	7/14/98	7/7/99		8/27/96	8/5/97	9/15/98	9/8/99		11/1/96	10/7/97	11/16/98	11/15/99			12/9/97																																										
9/12/95	2/20/96	1/28/97	3/10/98	2/17/99																																																																								
11/13/95	4/23/96	4/1/97	5/13/98	4/15/99																																																																								
	6/24/96	6/3/97	7/14/98	7/7/99																																																																								
	8/27/96	8/5/97	9/15/98	9/8/99																																																																								
	11/1/96	10/7/97	11/16/98	11/15/99																																																																								
		12/9/97																																																																										
<p>Number of Sample Days: 230</p>																																																																												
<p>Location:</p> <table border="1"> <thead> <tr> <th>Array</th> <th>Lat. (N)</th> <th>Lon. (W)</th> <th>Lat. (N) dec.</th> <th>Lon. (W) dec.</th> <th>Elevation (m)</th> <th>Datum</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>32°39'49.12"</td> <td>116°58'31.23"</td> <td>32.6636444</td> <td>116.9753417</td> <td>157</td> <td>NAD 83</td> </tr> <tr> <td>2</td> <td>32°39'44.89"</td> <td>116°58'46.92"</td> <td>32.6624694</td> <td>116.9797000</td> <td>158</td> <td>NAD 83</td> </tr> <tr> <td>3</td> <td>32°39'44.18"</td> <td>116°58'47.01"</td> <td>32.6622722</td> <td>116.9797250</td> <td>157</td> <td>NAD 83</td> </tr> <tr> <td>4</td> <td>32°39'46.98"</td> <td>116°58'50.14"</td> <td>32.6630500</td> <td>116.9805944</td> <td>152</td> <td>NAD 83</td> </tr> <tr> <td>5</td> <td>32°39'49.47"</td> <td>116°58'47.49"</td> <td>32.6637417</td> <td>116.9798583</td> <td>151</td> <td>NAD 83</td> </tr> <tr> <td>6</td> <td>32°39'00.17"</td> <td>116°59'27.13"</td> <td>32.6500472</td> <td>116.9908694</td> <td>91</td> <td>NAD 83</td> </tr> <tr> <td>7</td> <td>32°39'00.60"</td> <td>116°59'31.61"</td> <td>32.6501666</td> <td>116.9921139</td> <td>90</td> <td>NAD 83</td> </tr> <tr> <td>8</td> <td>32°39'02.32"</td> <td>116°59'36.20"</td> <td>32.6506444</td> <td>116.9933888</td> <td>90</td> <td>NAD 83</td> </tr> <tr> <td>9</td> <td>32°39'10.49"</td> <td>116°59'49.94"</td> <td>32.6529139</td> <td>116.9972056</td> <td>87</td> <td>NAD 83</td> </tr> </tbody> </table>							Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum	1	32°39'49.12"	116°58'31.23"	32.6636444	116.9753417	157	NAD 83	2	32°39'44.89"	116°58'46.92"	32.6624694	116.9797000	158	NAD 83	3	32°39'44.18"	116°58'47.01"	32.6622722	116.9797250	157	NAD 83	4	32°39'46.98"	116°58'50.14"	32.6630500	116.9805944	152	NAD 83	5	32°39'49.47"	116°58'47.49"	32.6637417	116.9798583	151	NAD 83	6	32°39'00.17"	116°59'27.13"	32.6500472	116.9908694	91	NAD 83	7	32°39'00.60"	116°59'31.61"	32.6501666	116.9921139	90	NAD 83	8	32°39'02.32"	116°59'36.20"	32.6506444	116.9933888	90	NAD 83	9	32°39'10.49"	116°59'49.94"	32.6529139	116.9972056	87	NAD 83
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum																																																																						
1	32°39'49.12"	116°58'31.23"	32.6636444	116.9753417	157	NAD 83																																																																						
2	32°39'44.89"	116°58'46.92"	32.6624694	116.9797000	158	NAD 83																																																																						
3	32°39'44.18"	116°58'47.01"	32.6622722	116.9797250	157	NAD 83																																																																						
4	32°39'46.98"	116°58'50.14"	32.6630500	116.9805944	152	NAD 83																																																																						
5	32°39'49.47"	116°58'47.49"	32.6637417	116.9798583	151	NAD 83																																																																						
6	32°39'00.17"	116°59'27.13"	32.6500472	116.9908694	91	NAD 83																																																																						
7	32°39'00.60"	116°59'31.61"	32.6501666	116.9921139	90	NAD 83																																																																						
8	32°39'02.32"	116°59'36.20"	32.6506444	116.9933888	90	NAD 83																																																																						
9	32°39'10.49"	116°59'49.94"	32.6529139	116.9972056	87	NAD 83																																																																						

Chula Vista II, Long Canyon

32.66754°, 116.96996°

32.66754°, 117.00305°



32.64921°, 116.96996°

32.64921°, 117.00305° NAD27



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

TN * MN
13 1/2°

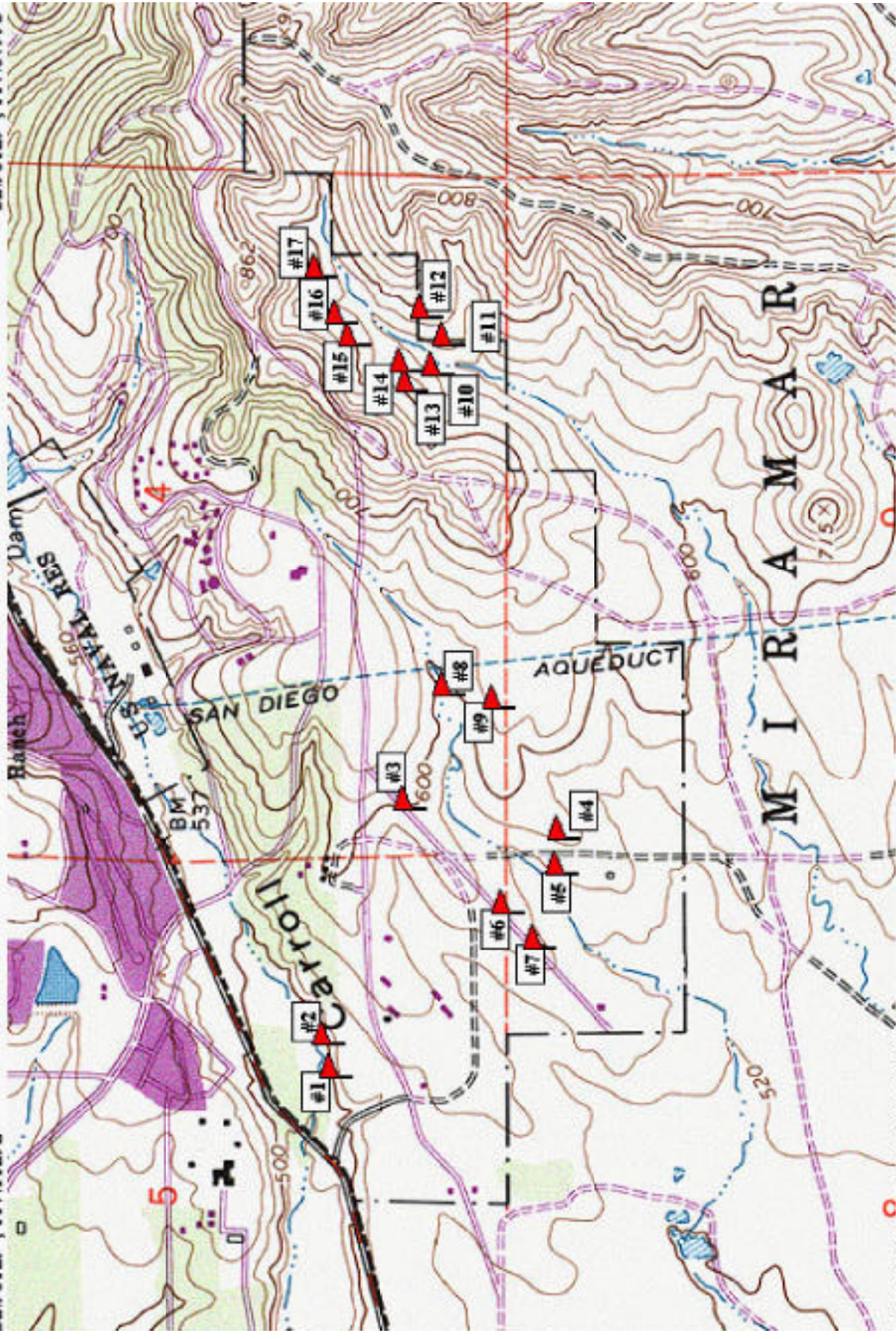
Site: Chula Vista II	Total 23 Sample Periods	Array Number									
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>										
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>						1				1
Arboreal Salamander	<i>Aneides lugubris</i>										
Monterey Salamander	<i>Ensatina eschscholtzi</i>										
Large-Blotched Salamander	<i>Ensatina klauberi</i>										
California Newt	<i>Taricha torosa</i>										
California Treefrog	<i>Hyla cadaverina</i>										
Pacific Treefrog	<i>Hyla regilla</i>										
Western Toad	<i>Bufo boreas</i>										
Arroyo Toad	<i>Bufo microscaphus</i>										
Red-Spotted Toad	<i>Bufo punctatus</i>										
Red-Legged Frog	<i>Rana aurora</i>										
Bullfrog	<i>Rana catesbeiana</i>										
African Clawed Frog	<i>Xenopus laevis</i>										
Western Spadefoot Toad	<i>Spea hammondi</i>			1							1
Western Pond Turtle	<i>Clemmys marmorata</i>										
Slider	<i>Trachemys sp.</i>										
Western Banded Gecko	<i>Coleonyx variegatus</i>										
Granite Night Lizard	<i>Xantusia henshawi</i>										
Desert Night Lizard	<i>Xantusia vigilis</i>										
California Legless Lizard	<i>Anniella pulchra</i>										
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	2	1		7	2	5	5	13	6	41
Gilbert Skink	<i>Eumeces gilberti</i>										
Western Skink	<i>Eumeces skiltonianus</i>	3	4	7	7	8					29
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	3	18	21	2	3	22	17	22	21	129
Western Whiptail	<i>Cnemidophorus tigris</i>		7	4	8						19
Desert Spiny Lizard	<i>Sceloporus magister</i>										
Sagebrush Lizard	<i>Sceloporus graciosus</i>										
Western Fence Lizard	<i>Sceloporus occidentalis</i>	44	18	13	22	18	24	24	33	24	220
Granite Spiny Lizard	<i>Sceloporus orcutti</i>										
Side-Blotched Lizard	<i>Uta stansburiana</i>		26	18	16	8	7	9	11	9	104
Coast Horned Lizard	<i>Phrynosoma coronatum</i>										
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>										
Western Blind Snake	<i>Leptotyphlops humilis</i>										
Rosy Boa	<i>Charina trivirgata</i>										
Glossy Snake	<i>Arizona elegans</i>										
Yellow-Bellied Racer	<i>Coluber constrictor</i>										
Western Ringneck Snake	<i>Diadophis punctatus</i>										
Night Snake	<i>Hypsiglena torquata</i>		1								1
California Kingsnake	<i>Lampropeltis getulus</i>	4	4	1	6	3		1	1		20
California Mountain Kingsnake	<i>Lampropeltis zonata</i>										
Coachwhip/Red Racer	<i>Masticophis flagellum</i>		1	2	3						6
Striped Racer	<i>Masticophis lateralis</i>		2	2	5	1	5	3	6	3	27
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1			1		4	4		1	11
Long-nosed Snake	<i>Rhinocheilus lecontei</i>									1	1
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>										
California Black-Headed Snake	<i>Tantilla planiceps</i>		1								1
Two-striped Garter Snake	<i>Thamnophis hammondi</i>										
Common Garter Snake	<i>Thamnophis sirtalis</i>										
Lyre Snake	<i>Trimorphodon biscutatus</i>										
Speckled Rattlesnake	<i>Crotalus mitchelli</i>										
Red Diamond Rattlesnake	<i>Crotalus ruber</i>				1						1
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>	1	2		2	1	1		1	2	10
	Number of Individuals	58	85	69	80	44	69	63	87	67	622
	Number of Species	7	12	9	12	8	8	7	7	8	17

Site Name:	Elliott Reserve					
County:	San Diego County					
Responsible Parties:	University of California, San Diego					
Contact:	Isabelle Kay					
Phone:	(619)534-2077					
Description: Elevation 166r218 meters. Elliott Reserve is several hundred acres, but is adjacent to coastal sage scrub habitats to the south on Miramar MCAS and there is no border between the two. The arrays are split between two different parts, some in the west and some in the east, covering a total of 142 hectares. The western arrays are in chamise chaparral with small vernal pools and the vernal meadows, and in general the habitat is flat and mesa like. The northern border of this site is Scripps Ranch. The eastern arrays are in a canyon dominated by chamise chaparral, with some coastal sage scrub and native grassland. There is a vernal creek that flows through the canyon. The upper end of the site has a eucalyptus grove. This site is within the MSCP planning area.						
Start dates for Sample Periods:						
	4/22/95	1/28/96	1/29/97	3/11/98	2/24/99	
	5/11/95	4/2/96	4/1/97	5/13/98	4/13/99	
	6/11/95	6/4/96	6/2/97	7/14/98	7/7/99	
	7/11/95	8/6/96	8/5/97	9/15/98	9/15/99	
	8/22/95	10/8/96	10/14/97	11/16/98	11/15/99	
	10/24/95		12/10/97			
Number of Sample Days: 280						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	32°53'38.96"	117°06'24.01"	32.8941555	117.1066694	168	NAD 83
2	32°53'39.82"	117°06'21.03"	32.8943944	117.1058417	166	NAD 83
3	32°53'33.57"	117°06'00.07"	32.8926583	117.1000194	186	NAD 83
4	32°53'22.28"	117°06'02.43"	32.8895222	117.1006750	183	NAD 83
5	32°53'22.14"	117°06'05.68"	32.8894833	117.1015778	181	NAD 83
6	32°53'26.26"	117°06'09.35"	32.8906278	117.1025972	178	NAD 83
7	32°53'23.92"	117°06'12.29"	32.8899778	117.1034139	176	NAD 83
8	32°53'30.30"	117°05'49.70"	32.8917500	117.0971389	194	NAD 83
9	32°53'27.24"	117°05'50.90"	32.8909000	117.0974722	198	NAD 83
10	32°53'31.54"	117°05'20.81"	32.8920944	117.0891139	203	NAD 83
11	32°53'30.98"	117°05'18.80"	32.8919389	117.0885556	207	NAD 83
12	32°53'32.41"	117°05'16.30"	32.8923361	117.0878611	213	NAD 83
13	32°53'33.49"	117°05'22.66"	32.8926361	117.0896278	210	NAD 83
14	32°53'33.66"	117°05'20.65"	32.8926833	117.0890694	208	NAD 83
15	32°53'37.78"	117°05'18.58"	32.8938278	117.0884944	212	NAD 83
16	32°53'38.67"	117°05'16.50"	32.8940750	117.0879167	212	NAD 83
17	32°53'40.31"	117°05'12.34"	32.8945306	117.0867611	218	NAD 83

Elliott

32.90129°, 117.11292°

32.90129°, 117.07993°



32.88296°, 117.11292° NAD83

32.88296°, 117.07993°

TN ★ /MN
13 1/2°



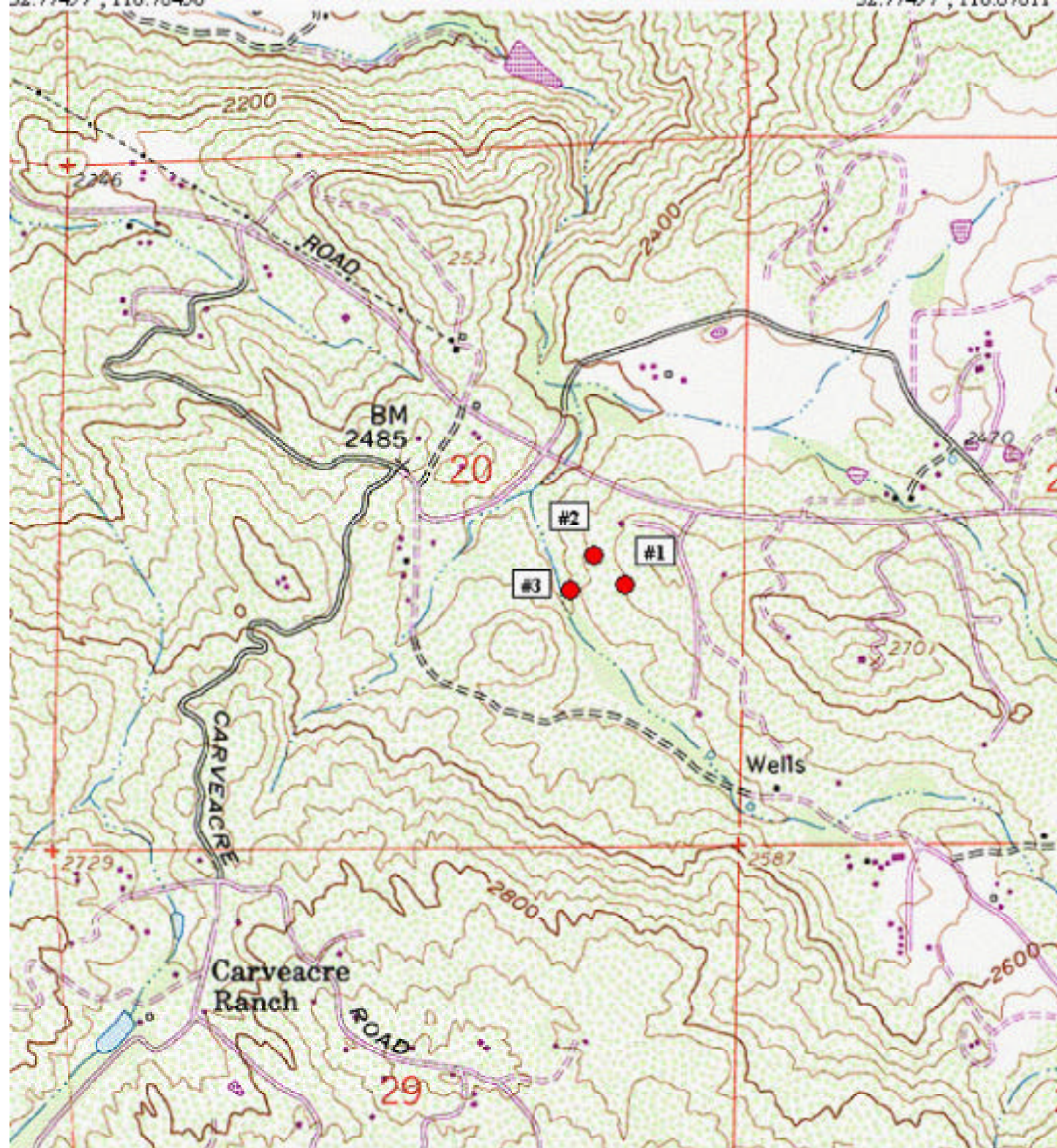
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

[illegible]

Pregill

32.77497°, 116.70458°

32.77497°, 116.67811°



32.75115°, 116.70458° NAD27

32.75115°, 116.67811°

TN MN
13 1/2°

0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

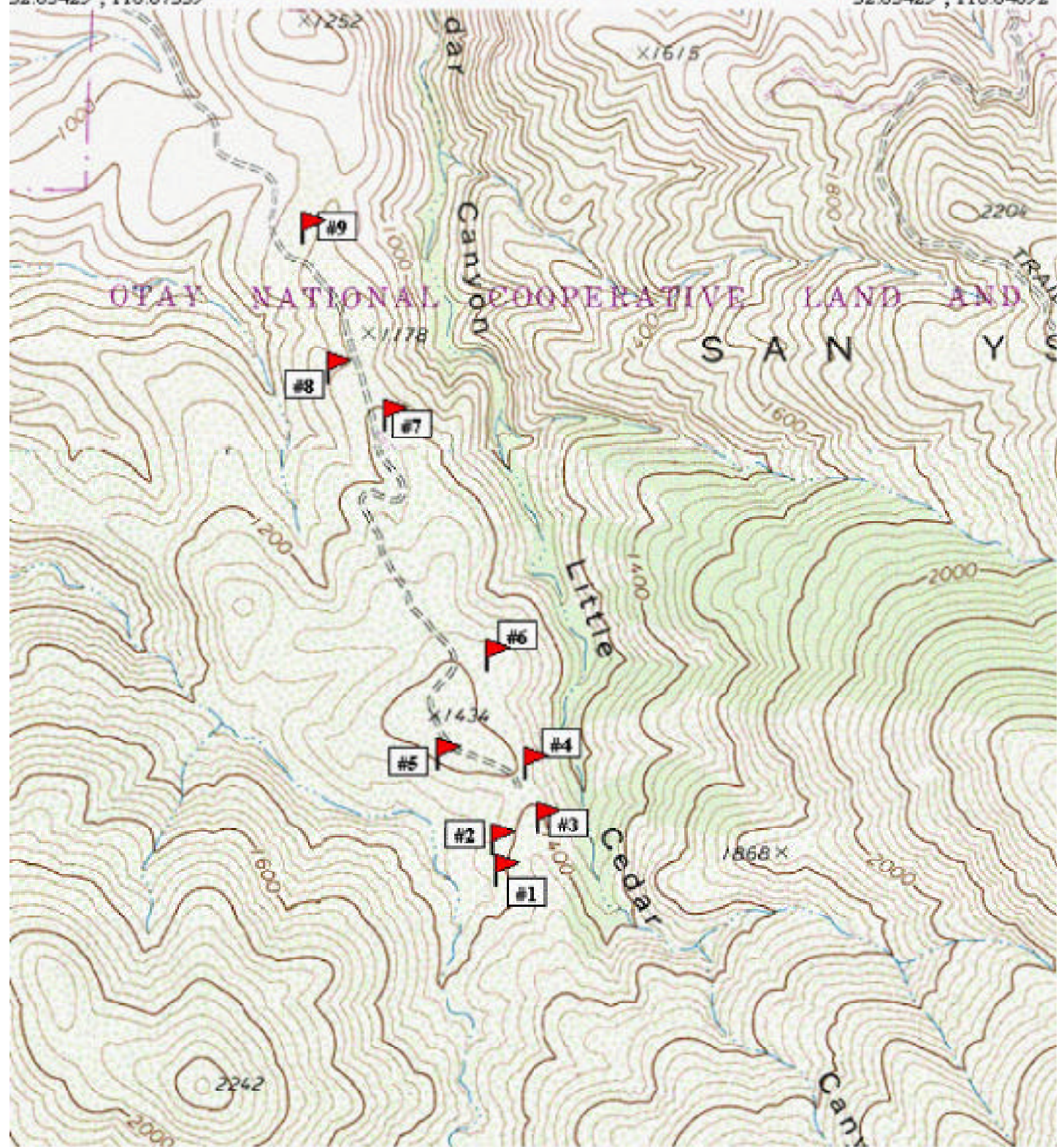
Site: Japatul	Total 5 Sample Periods	Array Number			
Common Name	Scientific Name	1	2	3	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>				
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>			1	1
Arboreal Salamander	<i>Aneides lugubris</i>				
Monterey Salamander	<i>Ensatina eschscholtzi</i>				
Large-Blotched Salamander	<i>Ensatina klauberi</i>				
California Newt	<i>Taricha torosa</i>				
California Treefrog	<i>Hyla cadaverina</i>				
Pacific Treefrog	<i>Hyla regilla</i>	2			2
Western Toad	<i>Bufo boreas</i>	10	1	1	12
Arroyo Toad	<i>Bufo microscaphus</i>				
Red-Spotted Toad	<i>Bufo punctatus</i>				
Red-Legged Frog	<i>Rana aurora</i>				
Bullfrog	<i>Rana catesbeiana</i>				
African Clawed Frog	<i>Xenopus laevis</i>				
Western Spadefoot Toad	<i>Spea hammondi</i>				
Western Pond Turtle	<i>Clemmys marmorata</i>				
Slider	<i>Trachemys sp.</i>				
Western Banded Gecko	<i>Coleonyx variegatus</i>				
Granite Night Lizard	<i>Xantusia henshawi</i>				
Desert Night Lizard	<i>Xantusia vigilis</i>				
California Legless Lizard	<i>Anniella pulchra</i>				
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>				
Gilbert Skink	<i>Eumeces gilberti</i>				
Western Skink	<i>Eumeces skiltonianus</i>	1			1
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>				
Western Whiptail	<i>Cnemidophorus tigris</i>	4	4	6	14
Desert Spiny Lizard	<i>Sceloporus magister</i>				
Sagebrush Lizard	<i>Sceloporus graciosus</i>				
Western Fence Lizard	<i>Sceloporus occidentalis</i>	4	2	7	13
Granite Spiny Lizard	<i>Sceloporus orcutti</i>		1	1	2
Side-Blotched Lizard	<i>Uta stansburiana</i>	3	6	6	15
Coast Horned Lizard	<i>Phrynosoma coronatum</i>		1	1	2
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>				
Western Blind Snake	<i>Leptotyphlops humilis</i>				
Rosy Boa	<i>Charina trivirgata</i>				
Glossy Snake	<i>Arizona elegans</i>				
Yellow-Bellied Racer	<i>Coluber constrictor</i>				
Western Ringneck Snake	<i>Diadophis punctatus</i>				
Night Snake	<i>Hypsiglena torquata</i>	1			1
California Kingsnake	<i>Lampropeltis getulus</i>			1	1
California Mountain Kingsnake	<i>Lampropeltis zonata</i>				
Coachwhip/Red Racer	<i>Masticophis flagellum</i>				
Striped Racer	<i>Masticophis lateralis</i>	1	2		3
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>				
Long-nosed Snake	<i>Rhinocheilus lecontei</i>				
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>				
California Black-Headed Snake	<i>Tantilla planiceps</i>				
Two-striped Garter Snake	<i>Thamnophis hammondi</i>				
Common Garter Snake	<i>Thamnophis sirtalis</i>				
Lyre Snake	<i>Trimorphodon biscutatus</i>				
Speckled Rattlesnake	<i>Crotalus mitchelli</i>				
Red Diamond Rattlesnake	<i>Crotalus ruber</i>				
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>				
	Number of Individuals	26	17	24	67
	Number of Species	8	7	8	12

Site Name:	Little Cedar Ridge																																																																											
County:	San Diego																																																																											
Responsible Parties:	Baldwin Company																																																																											
Contact:	Kathy Coates																																																																											
Phone:	(619)259-2900																																																																											
<p>Description: Elevation 327-443 meters. This study area is part of Otay Mountains and the arrays are on flat to north facing slope. The majority of the habitat is chamise chaparral, with patches of coastal sage scrub, and the upper region is Tecate cypress forest. Arrays cover approximately 100 hectares. Immigrants have created a major trail system through this study site including encampments near some of the arrays in the forest. Little Cedar Ridge is part of the MSCP planning area.</p>																																																																												
<p>Start dates for Sample Periods:</p> <table border="1"> <tr> <td>6/12/95</td> <td>1/9/96</td> <td>2/18/97</td> <td>1/28/98</td> <td>2/10/99</td> </tr> <tr> <td>8/1/95</td> <td>3/12/96</td> <td>4/22/97</td> <td>3/31/98</td> <td>5/25/99</td> </tr> <tr> <td>10/3/95</td> <td>5/14/96</td> <td>6/24/97</td> <td>6/2/98</td> <td>8/3/99</td> </tr> <tr> <td></td> <td>7/16/96</td> <td>9/3/97</td> <td>8/11/98</td> <td>10/12/99</td> </tr> <tr> <td></td> <td>9/17/96</td> <td>10/28/97</td> <td>10/13/98</td> <td></td> </tr> <tr> <td></td> <td>11/18/96</td> <td></td> <td></td> <td></td> </tr> </table>							6/12/95	1/9/96	2/18/97	1/28/98	2/10/99	8/1/95	3/12/96	4/22/97	3/31/98	5/25/99	10/3/95	5/14/96	6/24/97	6/2/98	8/3/99		7/16/96	9/3/97	8/11/98	10/12/99		9/17/96	10/28/97	10/13/98			11/18/96																																											
6/12/95	1/9/96	2/18/97	1/28/98	2/10/99																																																																								
8/1/95	3/12/96	4/22/97	3/31/98	5/25/99																																																																								
10/3/95	5/14/96	6/24/97	6/2/98	8/3/99																																																																								
	7/16/96	9/3/97	8/11/98	10/12/99																																																																								
	9/17/96	10/28/97	10/13/98																																																																									
	11/18/96																																																																											
<p>Number of Sample Days: 234</p>																																																																												
<p>Location:</p> <table border="1"> <thead> <tr> <th>Array</th> <th>Lat. (N)</th> <th>Lon. (W)</th> <th>Lat. (N) dec.</th> <th>Lon. (W) dec.</th> <th>Elevation (m)</th> <th>Datum</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>32°36'57.23"</td> <td>116°51'37.06"</td> <td>32.6158972</td> <td>116.8602944</td> <td>426</td> <td>NAD 83</td> </tr> <tr> <td>2</td> <td>32°36'59.31"</td> <td>116°51'37.42"</td> <td>32.6164750</td> <td>116.8603944</td> <td>443</td> <td>NAD 83</td> </tr> <tr> <td>3</td> <td>32°37'01.32"</td> <td>116°51'36.43"</td> <td>32.6170333</td> <td>116.8601194</td> <td>434</td> <td>NAD 83</td> </tr> <tr> <td>4</td> <td>32°37'05.26"</td> <td>116°51'37.94"</td> <td>32.6181278</td> <td>116.8605389</td> <td>420</td> <td>NAD 83</td> </tr> <tr> <td>5</td> <td>32°37'05.83"</td> <td>116°51'42.32"</td> <td>32.6182861</td> <td>116.8617556</td> <td>421</td> <td>NAD 83</td> </tr> <tr> <td>6</td> <td>32°37'13.88"</td> <td>116°51'39.56"</td> <td>32.6205222</td> <td>116.8609889</td> <td>418</td> <td>NAD 83</td> </tr> <tr> <td>7</td> <td>32°37'30.85"</td> <td>116°51'48.47"</td> <td>32.6252361</td> <td>116.8634639</td> <td>373</td> <td>NAD 83</td> </tr> <tr> <td>8</td> <td>32°37'34.76"</td> <td>116°51'54.02"</td> <td>32.6263222</td> <td>116.8650056</td> <td>351</td> <td>NAD 83</td> </tr> <tr> <td>9</td> <td>32°37'44.92"</td> <td>116°51'56.13"</td> <td>32.6291444</td> <td>116.8655917</td> <td>338</td> <td>NAD 83</td> </tr> </tbody> </table>							Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum	1	32°36'57.23"	116°51'37.06"	32.6158972	116.8602944	426	NAD 83	2	32°36'59.31"	116°51'37.42"	32.6164750	116.8603944	443	NAD 83	3	32°37'01.32"	116°51'36.43"	32.6170333	116.8601194	434	NAD 83	4	32°37'05.26"	116°51'37.94"	32.6181278	116.8605389	420	NAD 83	5	32°37'05.83"	116°51'42.32"	32.6182861	116.8617556	421	NAD 83	6	32°37'13.88"	116°51'39.56"	32.6205222	116.8609889	418	NAD 83	7	32°37'30.85"	116°51'48.47"	32.6252361	116.8634639	373	NAD 83	8	32°37'34.76"	116°51'54.02"	32.6263222	116.8650056	351	NAD 83	9	32°37'44.92"	116°51'56.13"	32.6291444	116.8655917	338	NAD 83
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum																																																																						
1	32°36'57.23"	116°51'37.06"	32.6158972	116.8602944	426	NAD 83																																																																						
2	32°36'59.31"	116°51'37.42"	32.6164750	116.8603944	443	NAD 83																																																																						
3	32°37'01.32"	116°51'36.43"	32.6170333	116.8601194	434	NAD 83																																																																						
4	32°37'05.26"	116°51'37.94"	32.6181278	116.8605389	420	NAD 83																																																																						
5	32°37'05.83"	116°51'42.32"	32.6182861	116.8617556	421	NAD 83																																																																						
6	32°37'13.88"	116°51'39.56"	32.6205222	116.8609889	418	NAD 83																																																																						
7	32°37'30.85"	116°51'48.47"	32.6252361	116.8634639	373	NAD 83																																																																						
8	32°37'34.76"	116°51'54.02"	32.6263222	116.8650056	351	NAD 83																																																																						
9	32°37'44.92"	116°51'56.13"	32.6291444	116.8655917	338	NAD 83																																																																						

Little Cedar

32.63425°, 116.87339°

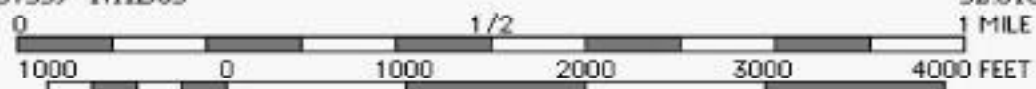
32.63425°, 116.84692°



32.61043°, 116.87339° NAD83

32.61043°, 116.84692°

TN ★ MN
13 1/4°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

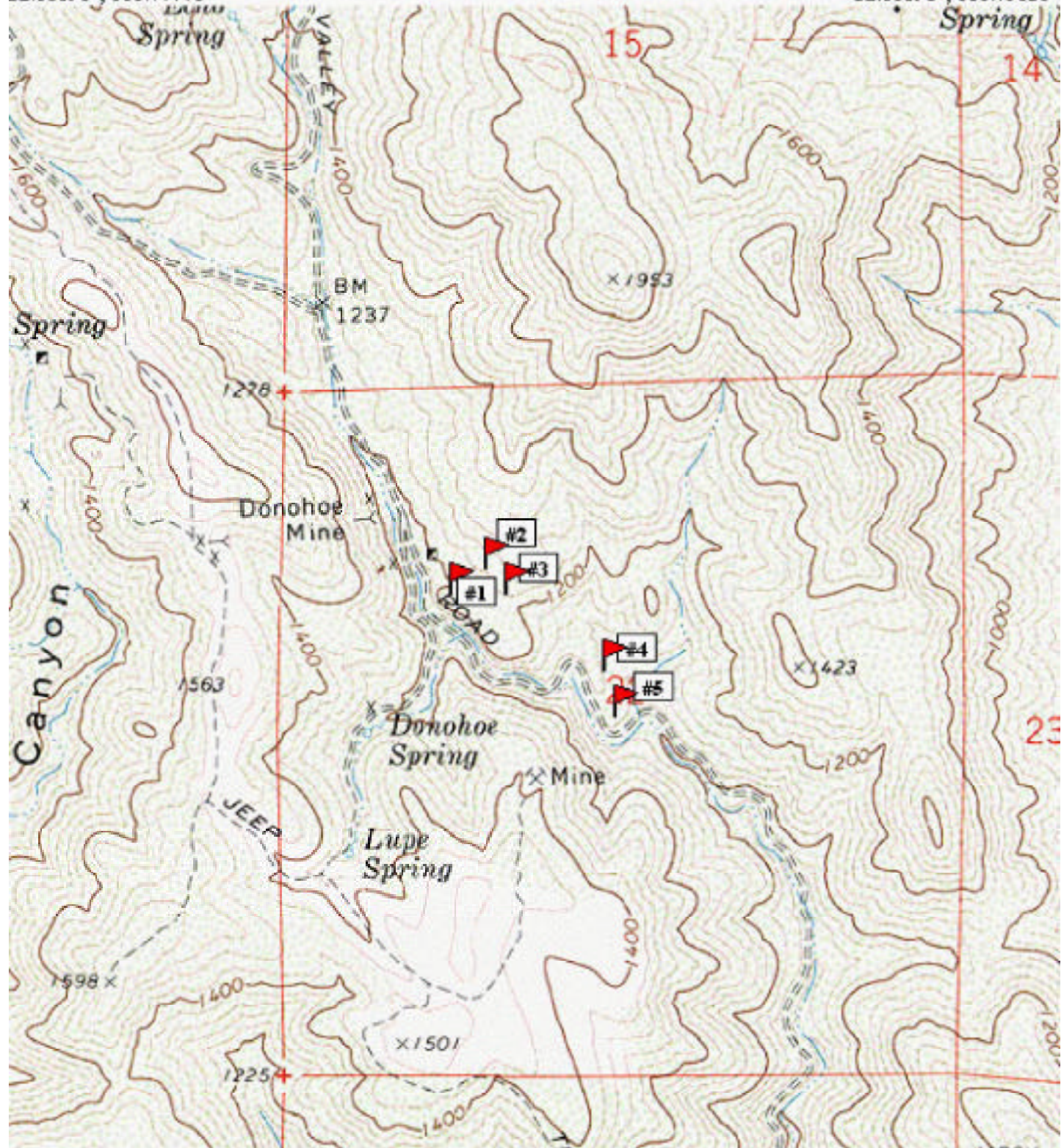
Site: Little Cedar Ridge	Total 23 Sample Periods	Array Number										
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	Total	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>											
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>	12	8	9	1		4				34	
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>					1					1	
Western Toad	<i>Bufo boreas</i>											
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>											
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>									1	1	
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	4	3	4	5	7	12	4	2	3	44	
Gilbert Skink	<i>Eumeces gilberti</i>						1				1	
Western Skink	<i>Eumeces skiltonianus</i>			9	10	4	3			2	28	
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>											
Western Whiptail	<i>Cnemidophorus tigris</i>	1	1		4	7			6	1	20	
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	26	14	13	10	19	11	37	33	15	178	
Granite Spiny Lizard	<i>Sceloporus orcutti</i>											
Side-Blotched Lizard	<i>Uta stansburiana</i>	1							8		9	
Coast Horned Lizard	<i>Phrynosoma coronatum</i>	1	1	2		9	2	24	44	6	89	
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>						1				1	
Rosy Boa	<i>Charina trivirgata</i>											
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>						1	1			2	
Night Snake	<i>Hypsiglena torquata</i>	1					1				2	
California Kingsnake	<i>Lampropeltis getulus</i>											
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>					1					1	
Striped Racer	<i>Masticophis lateralis</i>			1	7	4	1	1	3	4	21	
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1	2	2	5	4	6	2	2	2	26	
Long-nosed Snake	<i>Rhinocheilus lecontei</i>											
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>				3	1	1				5	
California Black-Headed Snake	<i>Tantilla planiceps</i>			2	1	3	1				7	
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>							1			1	
Speckled Rattlesnake	<i>Crotalus mitchelli</i>				2						2	
Red Diamond Rattlesnake	<i>Crotalus ruber</i>			1							1	
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>								1		1	
	Number of Individuals	47	29	43	48	60	45	70	99	34	475	
	Number of Species	8	6	9	10	11	13	7	8	8	22	

[illegible]

Marron Valley

32.60690°, 116.77776°

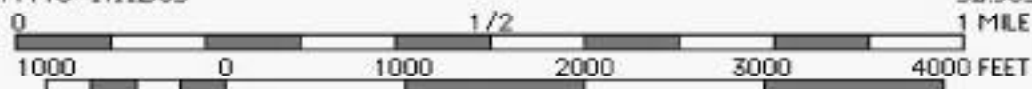
32.60690°, 116.75138°



32.58308°, 116.77776° NAD83

32.58308°, 116.75138°

TN
MN
13°

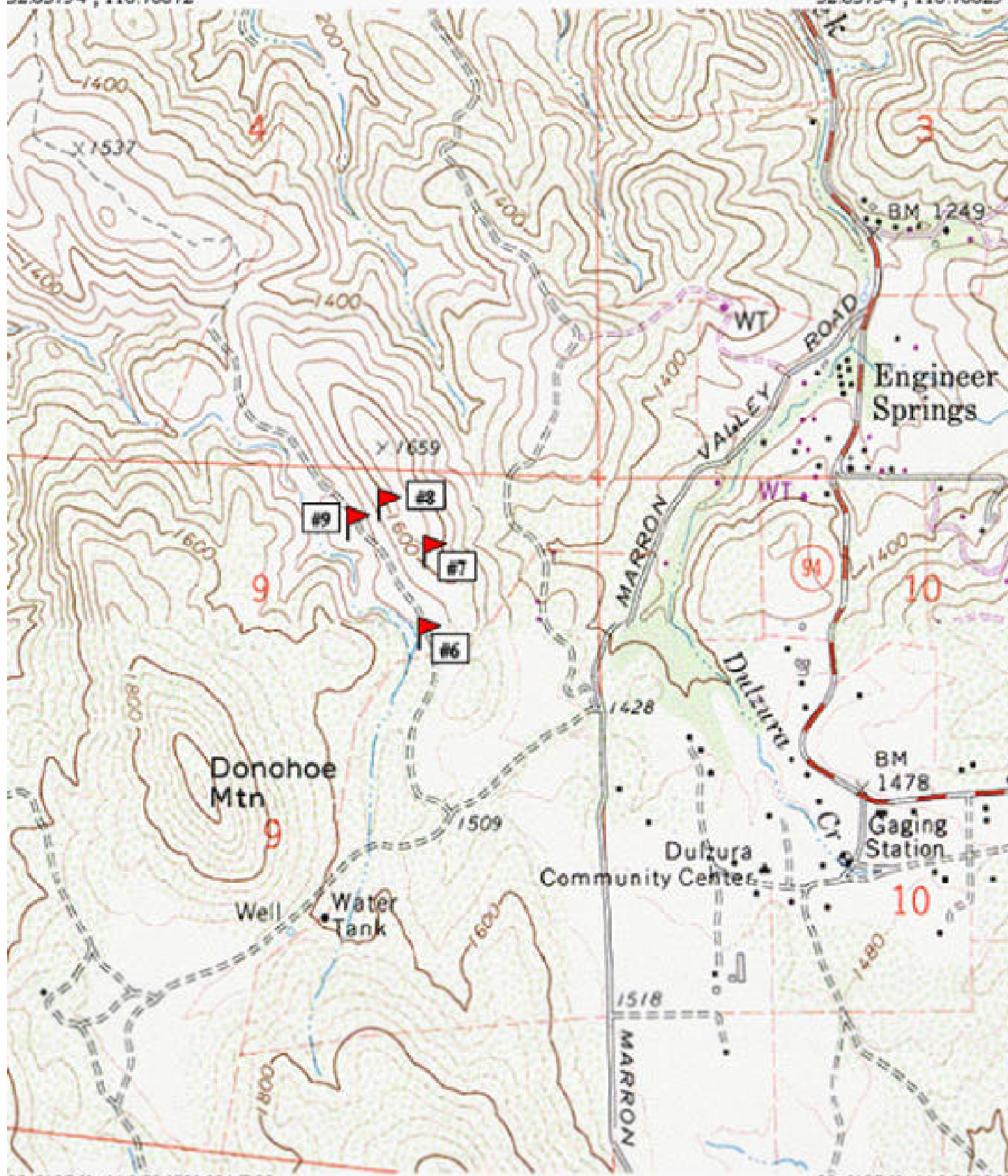


Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Marron Valley - Cattle Pond

32.63754°, 116.78672°

32.63754°, 116.76025°



32.61376°, 116.78672° NAD83

32.61376°, 116.76025°



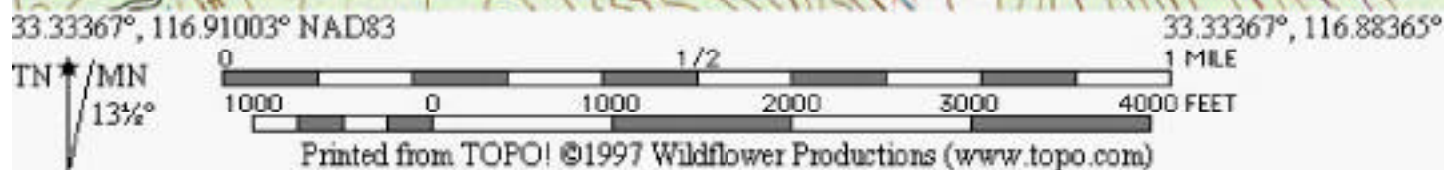
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site: Marron Valley	Total 23 Sample Periods	Array Number									Total
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>										
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>						1		2		3
Arboreal Salamander	<i>Aneides lugubris</i>										
Monterey Salamander	<i>Ensatina eschscholtzi</i>										
Large-Blotched Salamander	<i>Ensatina klauberi</i>										
California Newt	<i>Taricha torosa</i>										
California Treefrog	<i>Hyla cadaverina</i>				2						2
Pacific Treefrog	<i>Hyla regilla</i>						7	9	2	2	20
Western Toad	<i>Bufo boreas</i>	3			1		3	1	1		9
Arroyo Toad	<i>Bufo microscaphus</i>										
Red-Spotted Toad	<i>Bufo punctatus</i>										
Red-Legged Frog	<i>Rana aurora</i>										
Bullfrog	<i>Rana catesbeiana</i>										
African Clawed Frog	<i>Xenopus laevis</i>						174	17			191
Western Spadefoot Toad	<i>Spea hammondi</i>					1	15	7	4	2	29
Western Pond Turtle	<i>Clemmys marmorata</i>										
Slider	<i>Trachemys sp.</i>										
Western Banded Gecko	<i>Coleonyx variegatus</i>					2					2
Granite Night Lizard	<i>Xantusia henshawi</i>							1	1		2
Desert Night Lizard	<i>Xantusia vigilis</i>										
California Legless Lizard	<i>Anniella pulchra</i>										
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	1	1		1	1	2	1	1		8
Gilbert Skink	<i>Eumeces gilberti</i>										
Western Skink	<i>Eumeces skiltonianus</i>	5	27	21	28	20	17	18	5	9	150
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>										
Western Whiptail	<i>Cnemidophorus tigris</i>	46	44	34	23	63	12	21	38	10	291
Desert Spiny Lizard	<i>Sceloporus magister</i>										
Sagebrush Lizard	<i>Sceloporus graciosus</i>										
Western Fence Lizard	<i>Sceloporus occidentalis</i>	22	21	15	20	17	48	53	66	33	295
Granite Spiny Lizard	<i>Sceloporus orcutti</i>			1			3				4
Side-Blotched Lizard	<i>Uta stansburiana</i>	6	5	6	2	3	19	38	42	43	164
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						2				2
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>										
Western Blind Snake	<i>Leptotyphlops humilis</i>			1			2	1	2	5	11
Rosy Boa	<i>Charina trivirgata</i>						1				1
Glossy Snake	<i>Arizona elegans</i>										
Yellow-Bellied Racer	<i>Coluber constrictor</i>										
Western Ringneck Snake	<i>Diadophis punctatus</i>										
Night Snake	<i>Hypsiglena torquata</i>										
California Kingsnake	<i>Lampropeltis getulus</i>			1			3	1	2		7
California Mountain Kingsnake	<i>Lampropeltis zonata</i>										
Coachwhip/Red Racer	<i>Masticophis flagellum</i>			1		2				1	4
Striped Racer	<i>Masticophis lateralis</i>			4	3	2	4			1	14
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	3	6	4	4	3	3				23
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						1	2	1		4
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>	1	2	1						1	5
California Black-Headed Snake	<i>Tantilla planiceps</i>							1	2		3
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						52		1	4	57
Common Garter Snake	<i>Thamnophis sirtalis</i>										
Lyre Snake	<i>Trimorphodon biscutatus</i>										
Speckled Rattlesnake	<i>Crotalus mitchelli</i>										
Red Diamond Rattlesnake	<i>Crotalus ruber</i>	1								1	2
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>		3				2	1	1	2	9
Number of Individuals		88	109	89	84	114	371	172	171	114	1312
Number of Species		9	8	11	9	10	20	15	16	13	27

[illegible]

	Palomar Mountain	
33.35749°, 116.91003°		33.35749°, 116.88365°

33.35749°, 116.88365°



33.33367°, 116.88365°

0 1/2 1 MILE
1000 0 1000 2000 3000 4000 FEET
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site: Palomar Mountain	Total 7 Sample Periods	Array Number							
Common Name	Scientific Name	1	2	3	4	5	6	7	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>								
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>				3	1			4
Arboreal Salamander	<i>Aneides lugubris</i>								
Monterey Salamander	<i>Ensatina eschscholtzi</i>						1		1
Large-Blotched Salamander	<i>Ensatina klauberi</i>	4	4	4	4			1	17
California Newt	<i>Taricha torosa</i>								
California Treefrog	<i>Hyla cadaverina</i>								
Pacific Treefrog	<i>Hyla regilla</i>								
Western Toad	<i>Bufo boreas</i>							1	1
Arroyo Toad	<i>Bufo microscaphus</i>								
Red-Spotted Toad	<i>Bufo punctatus</i>								
Red-Legged Frog	<i>Rana aurora</i>								
Bullfrog	<i>Rana catesbeiana</i>								
African Clawed Frog	<i>Xenopus laevis</i>								
Western Spadefoot Toad	<i>Spea hammondi</i>								
Western Pond Turtle	<i>Clemmys marmorata</i>								
Slider	<i>Trachemys sp.</i>								
Western Banded Gecko	<i>Coleonyx variegatus</i>								
Granite Night Lizard	<i>Xantusia henshawi</i>								
Desert Night Lizard	<i>Xantusia vigilis</i>								
California Legless Lizard	<i>Anniella pulchra</i>								
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	4		1	1	2	1	1	10
Gilbert Skink	<i>Eumeces gilberti</i>								
Western Skink	<i>Eumeces skiltonianus</i>	3	1	1	2	6	2	5	20
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>								
Western Whiptail	<i>Cnemidophorus tigris</i>	2							2
Desert Spiny Lizard	<i>Sceloporus magister</i>								
Sagebrush Lizard	<i>Sceloporus graciosus</i>			3					3
Western Fence Lizard	<i>Sceloporus occidentalis</i>	6		1	6	9	6	2	30
Granite Spiny Lizard	<i>Sceloporus orcutti</i>								
Side-Blotched Lizard	<i>Uta stansburiana</i>	38			1	1			40
Coast Horned Lizard	<i>Phrynosoma coronatum</i>								
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>								
Western Blind Snake	<i>Leptotyphlops humilis</i>								
Rosy Boa	<i>Charina trivirgata</i>								
Glossy Snake	<i>Arizona elegans</i>								
Yellow-Bellied Racer	<i>Coluber constrictor</i>								
Western Ringneck Snake	<i>Diadophis punctatus</i>								
Night Snake	<i>Hypsiglena torquata</i>								
California Kingsnake	<i>Lampropeltis getulus</i>								
California Mountain Kingsnake	<i>Lampropeltis zonata</i>								
Coachwhip/Red Racer	<i>Masticophis flagellum</i>								
Striped Racer	<i>Masticophis lateralis</i>								
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>								
Long-nosed Snake	<i>Rhinocheilus lecontei</i>								
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>								
California Black-Headed Snake	<i>Tantilla planiceps</i>								
Two-striped Garter Snake	<i>Thamnophis hammondi</i>								
Common Garter Snake	<i>Thamnophis sirtalis</i>								
Lyre Snake	<i>Trimorphodon biscutatus</i>								
Speckled Rattlesnake	<i>Crotalus mitchelli</i>								
Red Diamond Rattlesnake	<i>Crotalus ruber</i>								
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>								
	Number of Individuals	57	5	10	17	19	10	10	128
	Number of Species	6	2	5	6	5	4	5	10

Site Name:	Point Loma					
County:	San Diego					
Responsible Parties:	National Park Services					
Contact:	Samantha Weber					
Phone:	(619)557-7307					
Description: Elevation 22-113 meters. This site is a medium size fragment with arrays sampling 116 hectares and is isolated by urban areas from any other natural lands. The majority of the habitat present is maritime succulent scrub, and coastal sage scrub. Some chamise chaparral, grassland and a wash are present also. The Point Loma research area is internally subdivided by roads and buildings, and has a lot of exposure to people. Point Loma is part of the MSCP planning area.						
Start dates for Sample Periods:						
	8/1/95	2/20/96	2/18/97	2/3/98	1/27/99	
	9/12/95	4/23/96	4/22/97	3/31/98	4/6/99	
	11/13/95	6/25/96	6/24/97	6/2/98	6/8/99	
		8/27/96	9/3/97	8/4/98	8/18/99	
		10/29/96	10/28/97	10/6/98	11/10/99	
Number of Sample Days: 230						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	32°40'58.95"	117°14'51.50"	32.6830417	117.2476389	26	NAD 83
2	32°40'19.21"	117°14'39.98"	32.6720028	117.2444389	22	NAD 83
3	32°40'01.43"	117°14'31.69"	32.6670639	117.2421361	22	NAD 83
4	32°40'05.45"	117°14'32.30"	32.6681806	117.2423056	33	NAD 83
5	32°41'45.32"	117°14'34.72"	32.6959222	117.2429778	83	NAD 83
6	32°41'44.19"	117°14'36.38"	32.6956083	117.2434389	82	NAD 83
7	32°41'41.64"	117°14'36.85"	32.6949000	117.2435694	90	NAD 83
8	32°42'12.42"	117°15'12.33"	32.7034500	117.2534250	33	NAD 83
9	32°40'26.50"	117°14'38.65"	32.6740278	117.2440694	42	NAD 83
10	32°42'20.65"	117°15'13.37"	32.7057361	117.2537139	35	NAD 83
11	32°41'02.70"	117°14'50.59"	32.6840833	117.2473861	37	NAD 83
12	32°41'01.66"	117°14'52.08"	32.6837944	117.2478000	31	NAD 83
13	32°40'11.55"	117°14'28.15"	32.6698750	117.2411528	109	NAD 83
14	32°40'12.65"	117°14'28.69"	32.6701806	117.2413028	113	NAD 83
15	32°40'08.14"	117°14'17.08"	32.6689278	117.2380778	54	NAD 83
16	32°40'10.05"	117°14'16.91"	32.6694583	117.2380306	55	NAD 83
17	32°40'30.39"	117°14'14.92"	32.6751083	117.2374778	37	NAD 83

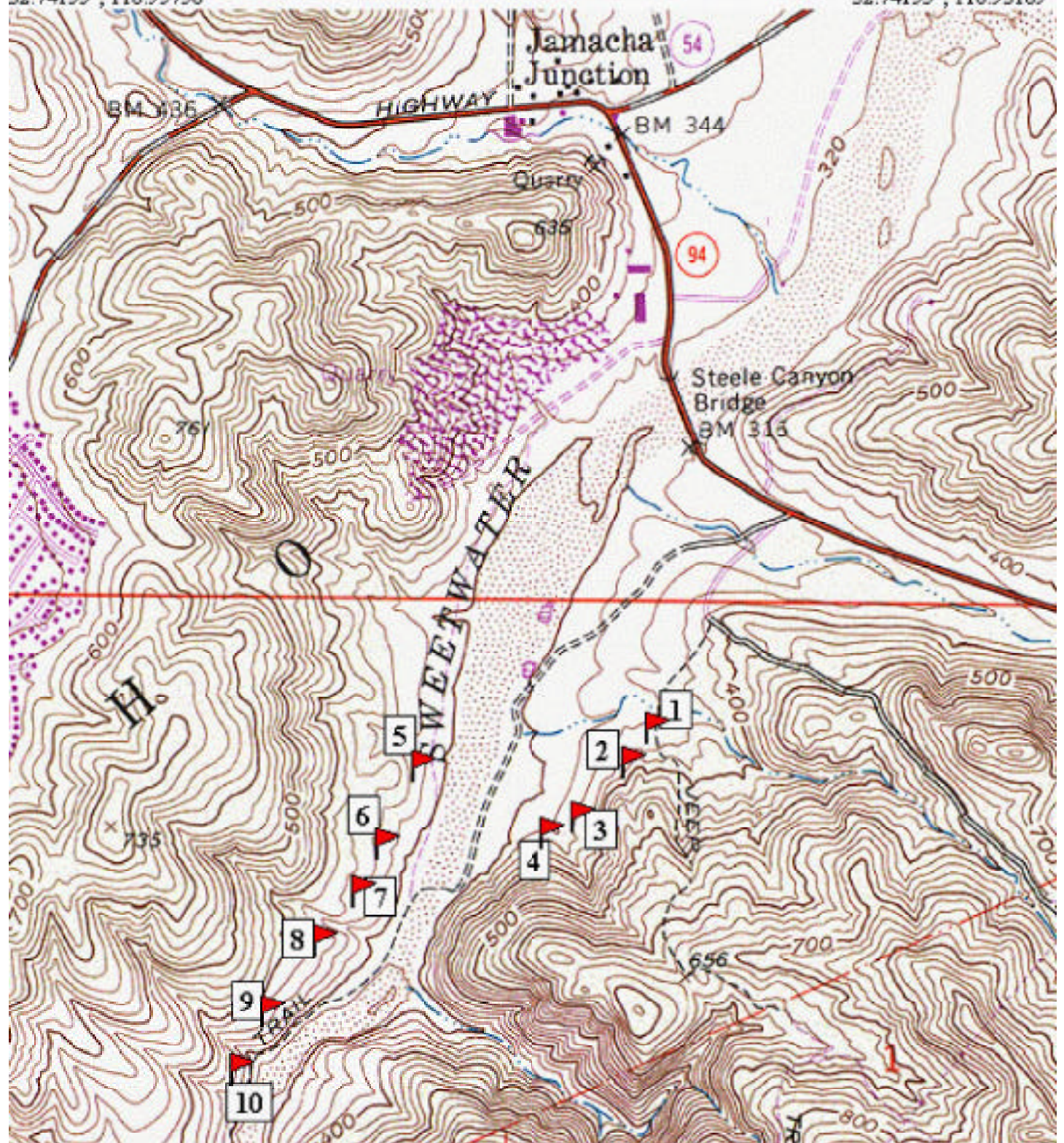


[illegible]

San Diego National Wildlife Refuge

32.74155°, 116.95756°

32.74155°, 116.93109°



32.71773°, 116.95756° NAD83

32.71773°, 116.93109°

TN
MN
13 1/2°

0 1/2 1 MILE
1000 0 1000 2000 3000 4000 FEET

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site: San Diego NWT	Total 24 Sample Periods	Array Number										
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>				1		3	9		3	3	19
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>	4	5	3	1			1			1	15
Western Toad	<i>Bufo boreas</i>					1						1
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>								1			1
Western Spadefoot Toad	<i>Spea hammondi</i>	2	3	7		8			1			21
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>		1									1
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>		1	1			1			1		4
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	6	4	3	9	2	5	4	12	3	3	51
Gilbert Skink	<i>Eumeces gilberti</i>			1								1
Western Skink	<i>Eumeces skiltonianus</i>	19	16	20	17	40	28	28	21	10	17	216
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	33	15	59	1	1	3	19	9	6	1	147
Western Whiptail	<i>Cnemidophorus tigris</i>	2	9	7		4	5	4	5	17	20	73
Desert Spiny Lizard	<i>Sceloporus magister</i>		1									1
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	13	16	12	14	34	26	26	15	14	14	184
Granite Spiny Lizard	<i>Sceloporus orcutti</i>		1	1			2			1	2	7
Side-Blotched Lizard	<i>Uta stansburiana</i>					4		1		5		10
Coast Horned Lizard	<i>Phrynosoma coronatum</i>		1	4		9		10	8	25	17	74
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>	5	4	6	2			2				19
Rosy Boa	<i>Charina trivirgata</i>							1	2			3
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>		2	1	1		1	4	2		1	12
Night Snake	<i>Hypsiglena torquata</i>			1					1	1		3
California Kingsnake	<i>Lampropeltis getulus</i>			1	1	7	1	1	2		2	15
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>			1		1			3			5
Striped Racer	<i>Masticophis lateralis</i>	3	4	7	2	7	5	9	9	6		52
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1	3		1	2	1	2	9		2	21
Long-nosed Snake	<i>Rhinocheilus lecontei</i>			2	1	2		1		1	1	8
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>											
California Black-Headed Snake	<i>Tantilla planiceps</i>		1	1	1	6	2					11
Two-striped Garter Snake	<i>Thamnophis hammondi</i>				1							1
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>		3				1	1	2			7
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>	3	3	3	4	1		1				15
Number of Individuals		91	93	141	58	129	84	124	102	93	84	999
Number of Species		11	19	20	15	16	14	18	16	13	13	30

Site Name:	Tijuana Estuary National Wildlife Refuge		
County:	San Diego		
Responsible Parties:	US Fish and Wildlife Services		
Contact:	Brian Collins		
Phone:	(619)575-2704		
Description: Elevation 0 -45 meters. This site is an interesting fragment with representatives of several rare habitat types. Of particular interest is the dune habitat and the maritime succulent scrub on the small coastal mesas. Also present are salt marsh and coastal sage scrub. There is quite a bit of human traffic through the habitat, with houses along the northern and southern borders, the southern boundary being the international border. Arrays cover 310 hectares. This site is part of the MSCP planning area.			
Start dates for Sample Periods:			
	3/11/97	2/5/98	2/2/99
	5/13/97	4/7/98	3/23/99
	7/15/97	6/1/98	6/8/99
	9/23/97	8/4/98	8/18/99
	11/16/97	10/6/98	11/2/99
	12/23/97		
Number of Sample Days: 160			
Array	Lat. (N) dec.	Lon. (W) dec.	Datum
1	32.5503478	117.1261375	NAD83
2	32.5479604	117.1249015	NAD83
3	32.5457875	117.1243691	NAD83
4	32.5422119	117.1234424	NAD83
5	32.5407665	117.1237969	NAD83
6	32.535075	117.1171042	NAD83
7	32.5351217	117.1191163	NAD83
8	32.5350532	117.1179519	NAD83
9	32.5391011	117.109126	NAD83
10	32.5384142	117.1076438	NAD83
11	32.5378235	117.1073918	NAD83
12	32.5602968	117.1263128	NAD83
13	32.559886	117.1244742	NAD83
14	32.5609874	117.1242619	NAD83
15	32.5616498	117.1257403	NAD83

Tijuana Estuary

32.56662°, 117.13790°

32.56662°, 117.10261°



32.53366°, 117.13790° NAD83

32.53366°, 117.10261°

TN MN
13°

0 1/2 1 MILE
1000 0 1000 2000 3000 4000 FEET

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site Name:	Torrey Pines I					
County:	San Diego					
Responsible Parties:	State Parks					
Contact:	Mike Wells					
Phone:	(858)775-2063					
Description: Elevation 92-107 meters. This site borders a golf course to the south, and is a coastal mesa top dominated by chamise chaparral. A controlled burn removed about half of the habitat, prior to the establishment of our study sites. The arrays represent a study area of 40 hectares. There is a large amount of human foot traffic on trails through the habitat. This site is part of the MSCP planning area.						
Start dates for Sample Periods:						
	6/11/95	2/20/96	2/19/97	2/17/98		
	7/11/95	4/22/96	4/22/97	4/21/98		
	8/21/95	6/23/96	6/24/97	6/23/98		
	11/13/95	8/26/96	9/3/97			
		10/29/96	10/28/97			
Number of Sample Days: 175						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	32°54'58.19"	117°14'54.86"	32.9161639	117.2485722	107	NAD 83
2	32°54'58.30"	117°14'58.58"	32.9161944	117.2496056	93	NAD 83
3	32°54'53.58"	117°15'00.04"	32.9148833	117.2500111	98	NAD 83
4	32°54'54.35"	117°15'04.07"	32.9150972	117.2511306	99	NAD 83
5	32°54'53.67"	117°15'06.58"	32.9149083	117.2518278	97	NAD 83
6	32°54'52.15"	117°15'02.26"	32.9144861	117.2506278	101	NAD 83
7	32°54'49.98"	117°15'00.83"	32.9138833	117.2502306	101	NAD 83
8	32°54'48.82"	117°15'01.83"	32.9135611	117.2505083	92	NAD 83
9	32°54'48.97"	117°14'57.23"	32.9136028	117.2492306	99	NAD 83
10	32°54'54.17"	117°14'51.15"	32.9150472	117.2475417	104	NAD 83

Torrey Pines 1

32.92632°, 117.26479°

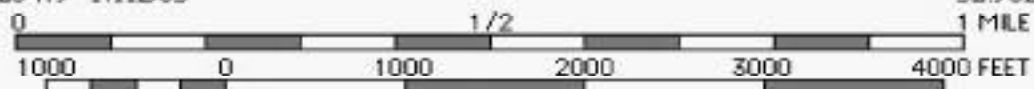
32.92632°, 117.23841°



32.90251°, 117.26479° NAD83

32.90251°, 117.23841°

TN ★ / MN
13 1/2°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

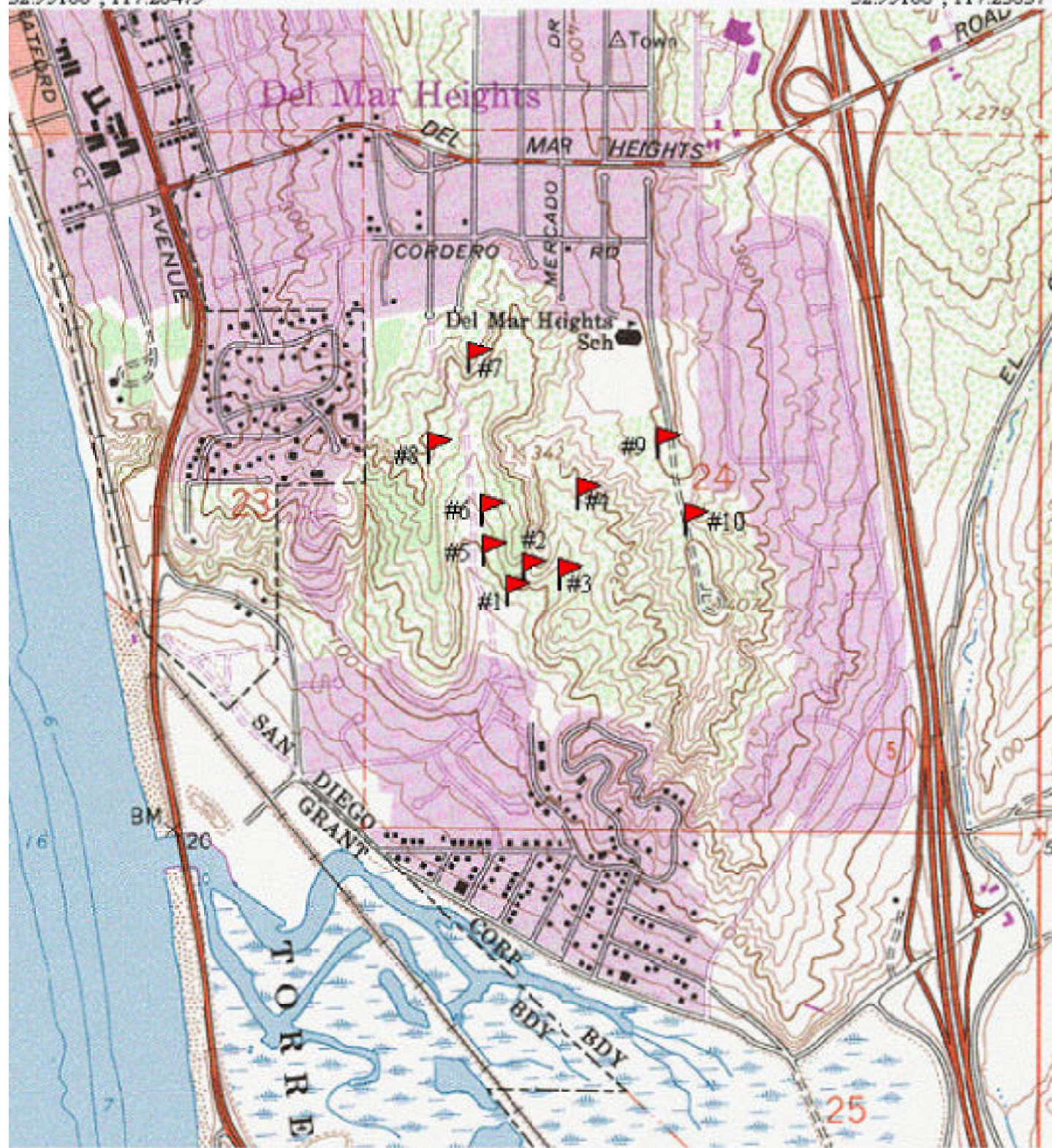
Site: Torrey Pines I	Total 17 Sample Periods	Array Number										Total
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	4		9		2	1		1	2	7	26
Arboreal Salamander	<i>Aneides lugubris</i>	1		1	1				1			4
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>	1		2	1	3	1				2	10
Western Toad	<i>Bufo boreas</i>											
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>											
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	1	2	1	1	7	12	3	3	1	9	40
Gilbert Skink	<i>Eumeces gilberti</i>											
Western Skink	<i>Eumeces skiltonianus</i>					1				1		2
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	22	20	6	13	23	17	21	11	14	17	164
Western Whiptail	<i>Cnemidophorus tigris</i>	3		1	1	3	10			2	12	32
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	19	26	31	19	29	21	14	29	19	36	243
Granite Spiny Lizard	<i>Sceloporus orcutti</i>											
Side-Blotched Lizard	<i>Uta stansburiana</i>	15	4	3	16	22	12	22	17	17	9	137
Coast Horned Lizard	<i>Phrynosoma coronatum</i>	1					1				2	4
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>											
Rosy Boa	<i>Charina trivirgata</i>											
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>											
Night Snake	<i>Hypsiglena torquata</i>					1		2			1	4
California Kingsnake	<i>Lampropeltis getulus</i>			1								1
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>											
Striped Racer	<i>Masticophis lateralis</i>	2	6	1	2	2	3	2	1	1	2	22
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>				1	1			2		1	5
Long-nosed Snake	<i>Rhinocheilus lecontei</i>											
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>											
California Black-Headed Snake	<i>Tantilla planiceps</i>											
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>											
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>									1	1	2
Number of Individuals		69	58	56	55	94	78	64	65	58	99	696
Number of Species		10	5	10	9	11	9	6	8	9	12	15

Site Name:	Torrey Pines II					
County:	San Diego					
Responsible Parties:	State Parks					
Contact:	Mike Wells					
Phone:	(858)775-2063					
Description: Elevation 54-122 meters. This research plot is a canyon/wash surrounded by houses and separated from the rest of the park by Carmel Valley. The main habitat present is coastal sage scrub, with some chamise chaparral on the mesa top, and some Torrey Pine forest scattered around. 45 hectares are sampled by the arrays. There is a large amount of human foot traffic on trails through the habitat. This site is part of the MSCP planning area.						
Start dates for Sample Periods:						
	10/3/95	1/8/96	1/28/97	3/10/98		
		3/12/96	4/1/97	5/12/98		
		5/13/96	6/2/97	7/13/98		
		7/15/96	8/5/97			
		9/17/96	10/14/97			
		11/18/96	12/9/97			
Number of Sample Days: 160						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	32°56'21.66"	117°15'08.17"	32.9393500	117.2522694	54	NAD 83
2	32°56'23.32"	117°15'06.64"	32.9398111	117.2518444	62	NAD 83
3	32°56'23.09"	117°15'03.31"	32.9397472	117.2509194	69	NAD 83
4	32°56'29.11"	117°15'01.63"	32.9414194	117.2504528	85	NAD 83
5	32°56'24.92"	117°15'10.33"	32.9402556	117.2528694	62	NAD 83
6	32°56'27.79"	117°15'10.45"	32.9410528	117.2529028	73	NAD 83
7	32°56'39.09"	117°15'11.60"	32.9441917	117.2532222	90	NAD 83
8	32°56'35.88"	117°15'09.00"	32.9433000	117.2525000	90	NAD 83
9	32°56'32.42"	117°14'53.69"	32.9423389	117.2482472	120	NAD 83
10	32°56'26.95"	117°14'51.92"	32.9408194	117.2477556	122	NAD 83

Torrey Pines 2

32.95186°, 117.26475°

32.95186°, 117.23837°



32.92804°, 117.26475° NAD83

32.92804°, 117.23837°

TN ★/MN
13½°

0 1000 2000 3000 4000 FEET

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

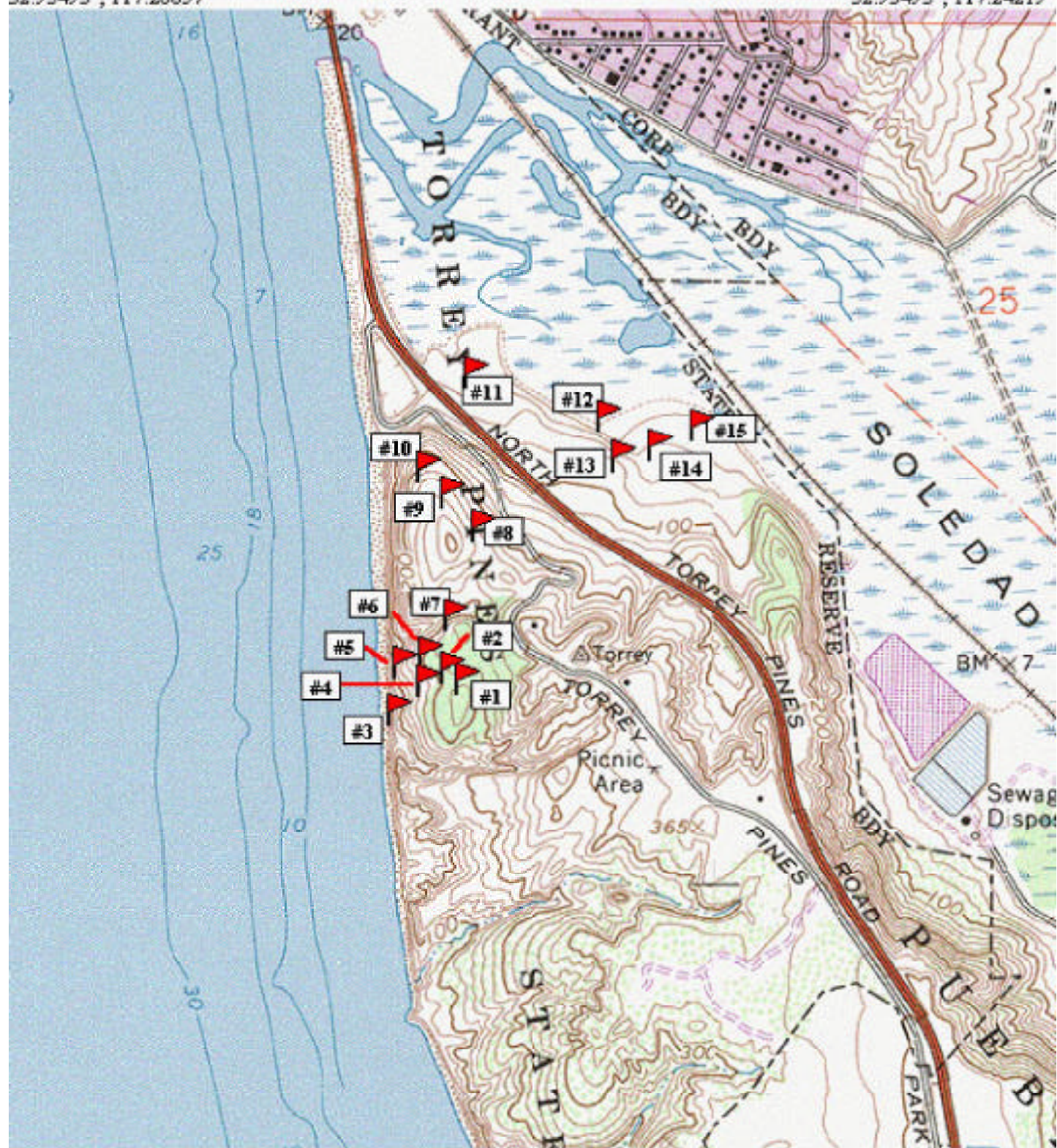
Site: Torrey Pines II	Total 16 Sample Periods	Array Number										Total
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	1	11	4	15	6		29	2		4	72
Arboreal Salamander	<i>Aneides lugubris</i>					1		1				2
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>											
Western Toad	<i>Bufo boreas</i>											
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>											
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	15	12	5	20	8	9	14	7	5	3	98
Gilbert Skink	<i>Eumeces gilberti</i>											
Western Skink	<i>Eumeces skiltonianus</i>						6	7	4			17
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	9	37	14	7	27	26	2	11	27	35	195
Western Whiptail	<i>Cnemidophorus tigris</i>											
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	34	15	22	37	26	29	25	34	38	32	292
Granite Spiny Lizard	<i>Sceloporus orcutti</i>											
Side-Blotched Lizard	<i>Uta stansburiana</i>	27	32	14	12	35	9	2	31	13	9	184
Coast Horned Lizard	<i>Phrynosoma coronatum</i>	1	2	11	6					5	5	30
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>											
Rosy Boa	<i>Charina trivirgata</i>											
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>	1	1		1	4	1	1	4			13
Night Snake	<i>Hypsiglena torquata</i>						1					1
California Kingsnake	<i>Lampropeltis getulus</i>		1		1		3			1		6
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>											
Striped Racer	<i>Masticophis lateralis</i>	5	2	2	2	1	3		3	2	1	21
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1										1
Long-nosed Snake	<i>Rhinocheilus lecontei</i>											
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>											
California Black-Headed Snake	<i>Tantilla planiceps</i>											
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>											
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>		1		1	1						3
Number of Individuals		94	114	72	102	109	87	81	96	91	89	935
Number of Species		9	10	7	10	9	9	8	8	7	7	14

Site Name:	Torrey Pines III					
County:	San Diego					
Responsible Parties:	State Parks					
Contact:	Mike Wells					
Phone:	(858)775-2063					
Description: Elevation 11-71 meters. This site is divided into three parts, each with a few arrays. The first is dominated by coastal sage scrub, with some maritime succulent scrub. The second is Torrey Pine forest with thick chaparral, and the third borders the salt marsh and has maritime succulent scrub and coastal sage scrub. There is a large amount of human foot traffic on trails through only the first two areas, the third is relatively undisturbed. 79 hectares are						
Start dates for Sample Periods:						
	10/24/95	1/30/96	1/7/97	2/17/98		
		4/2/96	3/11/97	4/21/98		
		6/3/96	5/13/97	6/23/98		
		8/6/96	7/15/97	8/24/98		
		10/9/96	9/23/97	10/26/98		
			11/17/97			
Number of Sample Days: 170						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	32°55'13.99"	117°15'23.80"	32.9205528	117.2566111	66	NAD 83
2	32°55'14.93"	117°15'24.71"	32.9208139	117.2568639	66	NAD 83
3	32°55'11.83"	117°15'29.40"	32.9199528	117.2581667	61	NAD 83
4	32°55'14.05"	117°15'26.87"	32.9205694	117.2574639	62	NAD 83
5	32°55'15.37"	117°15'29.31"	32.9209361	117.2581417	44	NAD 83
6	32°55'15.78"	117°15'26.76"	32.9210500	117.2574333	54	NAD 83
7	32°55'18.18"	117°15'24.62"	32.9217167	117.2568389	59	NAD 83
8	32°55'25.77"	117°15'21.89"	32.9238250	117.2560806	70	NAD 83
9	32°55'28.15"	117°15'24.70"	32.9244861	117.2568611	26	NAD 83
10	32°55'29.82"	117°15'26.72"	32.9249500	117.2574222	71	NAD 83
11	32°55'37.31"	117°15'22.64"	32.9270306	117.2562889	16	NAD 83
12	32°55'33.95"	117°15'10.41"	32.9260972	117.2528917	12	NAD 83
13	32°55'31.06"	117°15'06.46"	32.9252944	117.2517944	20	NAD 83
14	32°55'30.80"	117°15'09.13"	32.9252222	117.2525361	23	NAD 83
15	32°55'33.19"	117°15'02.08"	32.9258861	117.2505778	11	NAD 83

Torrey Pines 3

32.93493°, 117.26857°

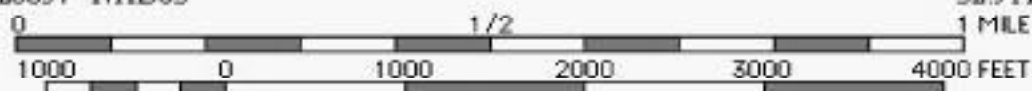
32.93493°, 117.24219°



32.91112°, 117.26857° NAD83

32.91112°, 117.24219°

TN / MN
13 1/2°



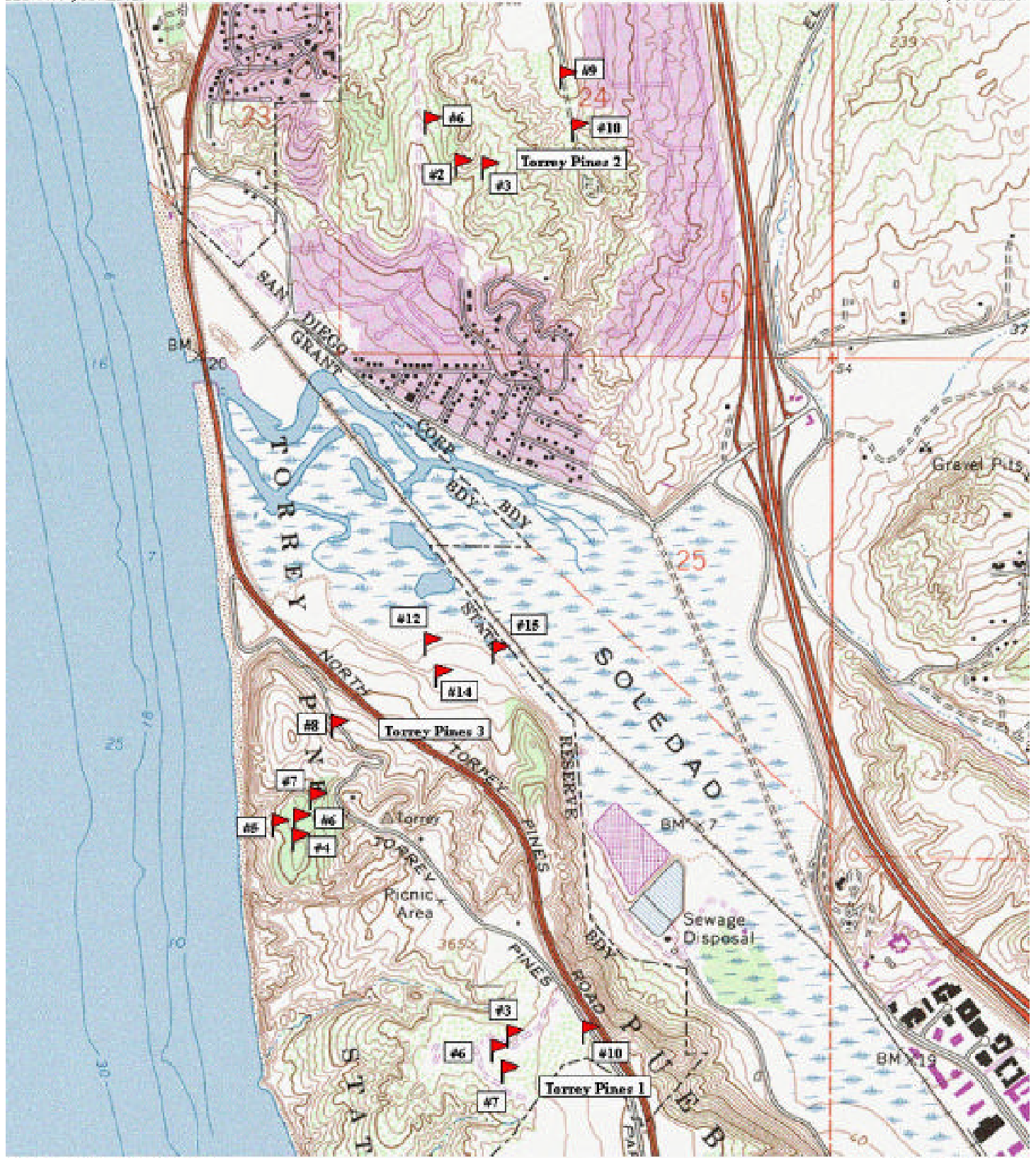
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site Name:	New Torrey Pines					
County:	San Diego					
Responsible Parties:	State Parks					
Contact:	Mike Wells					
Phone:	(858)775-2063					
Description: Elevation 11-122 meters. The three site formerly known as Torrey Pines I, Torrey Pines II, and Torrey Pines III, have been combined and slimmed down to selected arrays. Torrey Pines I is represented by four arrays, Torrey Pines II by five arrays, and Torrey Pines III with eight arrays. The New Torrey Pines site picks up where the data stops for the former three sites.						
Start dates for Sample Periods:						
	3/10/99					
	5/4/99					
	7/21/99					
	9/28/99					
	12/1/99					
Number of Sample Days:	50					
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
TP 1-3	32°54'53.58"	117°15'00.04"	32.9148833	117.2500111	98	NAD 83
TP 1-6	32°54'52.15"	117°15'02.26"	32.9144861	117.2506278	101	NAD 83
TP 1-7	32°54'49.98"	117°15'00.83"	32.9138833	117.2502306	101	NAD 83
TP 1-10	32°54'54.17"	117°14'51.15"	32.9150472	117.2475417	104	NAD 83
TP 2-2	32°56'23.32"	117°15'06.64"	32.9398111	117.2518444	62	NAD 83
TP 2-3	32°56'23.09"	117°15'03.31"	32.9397472	117.2509194	69	NAD 83
TP 2-6	32°56'27.79"	117°15'10.45"	32.9410528	117.2529028	73	NAD 83
TP 2-9	32°56'32.42"	117°14'53.69"	32.9423389	117.2482472	120	NAD 83
TP 2-10	32°56'26.95"	117°14'51.92"	32.9408194	117.2477556	122	NAD 83
TP 3-4	32°55'14.05"	117°15'26.87"	32.9205694	117.2574639	62	NAD 83
TP 3-5	32°55'15.37"	117°15'29.31"	32.9209361	117.2581417	44	NAD 83
TP 3-6	32°55'15.78"	117°15'26.76"	32.9210500	117.2574333	54	NAD 83
TP 3-7	32°55'18.18"	117°15'24.62"	32.9217167	117.2568389	59	NAD 83
TP 3-8	32°55'25.77"	117°15'21.89"	32.9238250	117.2560806	70	NAD 83
TP 3-12	32°55'33.95"	117°15'10.41"	32.9260972	117.2528917	12	NAD 83
TP 3-14	32°55'30.80"	117°15'09.13"	32.9252222	117.2525361	23	NAD 83
TP 3-15	32°55'33.19"	117°15'02.08"	32.9258861	117.2505778	11	NAD 83

New Torrey Pines

32.94477°, 117.26729°

32.94477°, 117.23200°



32.91181°, 117.26729° NAD83

32.91181°, 117.23200°

TN
MN
134°



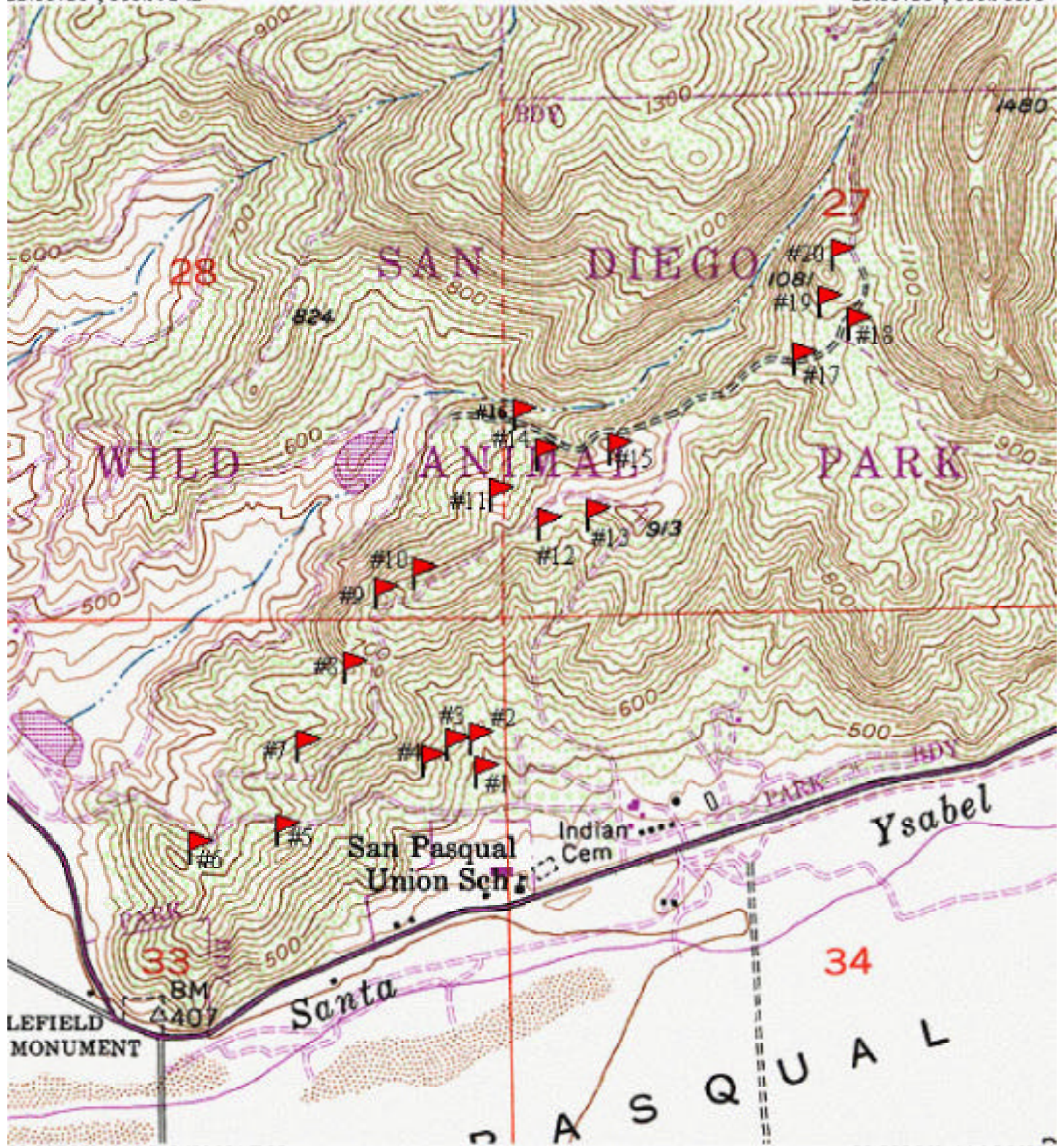
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site Name:	Wild Animal Park					
County:	San Diego					
Responsible Parties:	San Diego Zoological Society					
Contact:	Jeff Opdycke					
Phone:	(619)744-3312					
Description: Elevation 141-255 meters. This site is the only unburned edge of the huge Guejito fire of 1993. The habitat is almost entirely coastal sage scrub except where grassland is growing in some of the burn area. The 20 arrays sample approximately 113 hectares. There is little human traffic, and this site is part of the MSCP planning area.						
Start dates for Sample Periods:						
	5/11/95	1/9/96	2/19/97	2/19/98	3/2/99	
	6/11/95	3/12/96	4/22/97	4/20/98	5/11/99	
	8/1/95	5/14/96	6/24/97	6/23/98	7/28/99	
	10/3/95	7/15/96	9/3/97	8/25/98	10/12/99	
		9/17/96	10/27/97	10/27/98		
		11/18/96				
Number of Sample Days: 250						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33°05'27.60"	116°58'54.05"	33.0910000	116.9816806	141	NAD 83
2	33°05'29.90"	116°58'54.48"	33.0916389	116.9818000	146	NAD 83
3	33°05'29.52"	116°58'56.68"	33.0915333	116.9824111	162	NAD 83
4	33°05'28.37"	116°58'58.75"	33.0912139	116.9829861	173	NAD 83
5	33°05'23.40"	116°59'12.06"	33.0898333	116.9866833	201	NAD 83
6	33°05'21.52"	116°59'19.94"	33.0893111	116.9888722	177	NAD 83
7	33°05'29.65"	116°59'10.27"	33.0915694	116.9861861	194	NAD 83
8	33°05'35.57"	116°59'05.90"	33.0932139	116.9849722	191	NAD 83
9	33°05'40.97"	116°59'03.00	33.0947139	116.9841667	237	NAD 83
10	33°05'42.58"	116°58'59.55"	33.0951611	116.9832083	247	NAD 83
11	33°05'48.44"	116°58'52.63"	33.0967889	116.9812861	236	NAD 83
12	33°05'46.07"	116°58'48.18"	33.0961306	116.9800500	242	NAD 83
13	33°05'47.06"	116°58'43.57"	33.0964056	116.9787694	254	NAD 83
14	33°05'51.38"	116°58'48.41"	33.0976056	116.9801139	248	NAD 83
15	33°05'51.68"	116°58'41.68"	33.0976889	116.9782444	254	NAD 83
16	33°05'52.57"	116°58'47.37"	33.0979361	116.9798250	254	NAD 83
17	33°05'58.73"	116°58'24.97"	33.0996472	116.9736028	255	NAD 83
18	33°06'01.52"	116°58'20.05"	33.1004222	116.9722361	254	NAD 83
19	33°06'03.00"	116°58'22.61"	33.1008333	116.9729472	255	NAD 83
20	33°06'06.59"	116°58'21.48"	33.1018306	116.9726333	255	NAD 83

Wild Animal Park

33.10738°, 116.99342°

33.10738°, 116.96695°



33.08356°, 116.99342° NAD83

33.08356°, 116.96695°

TN
MN
13 1/2°

0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

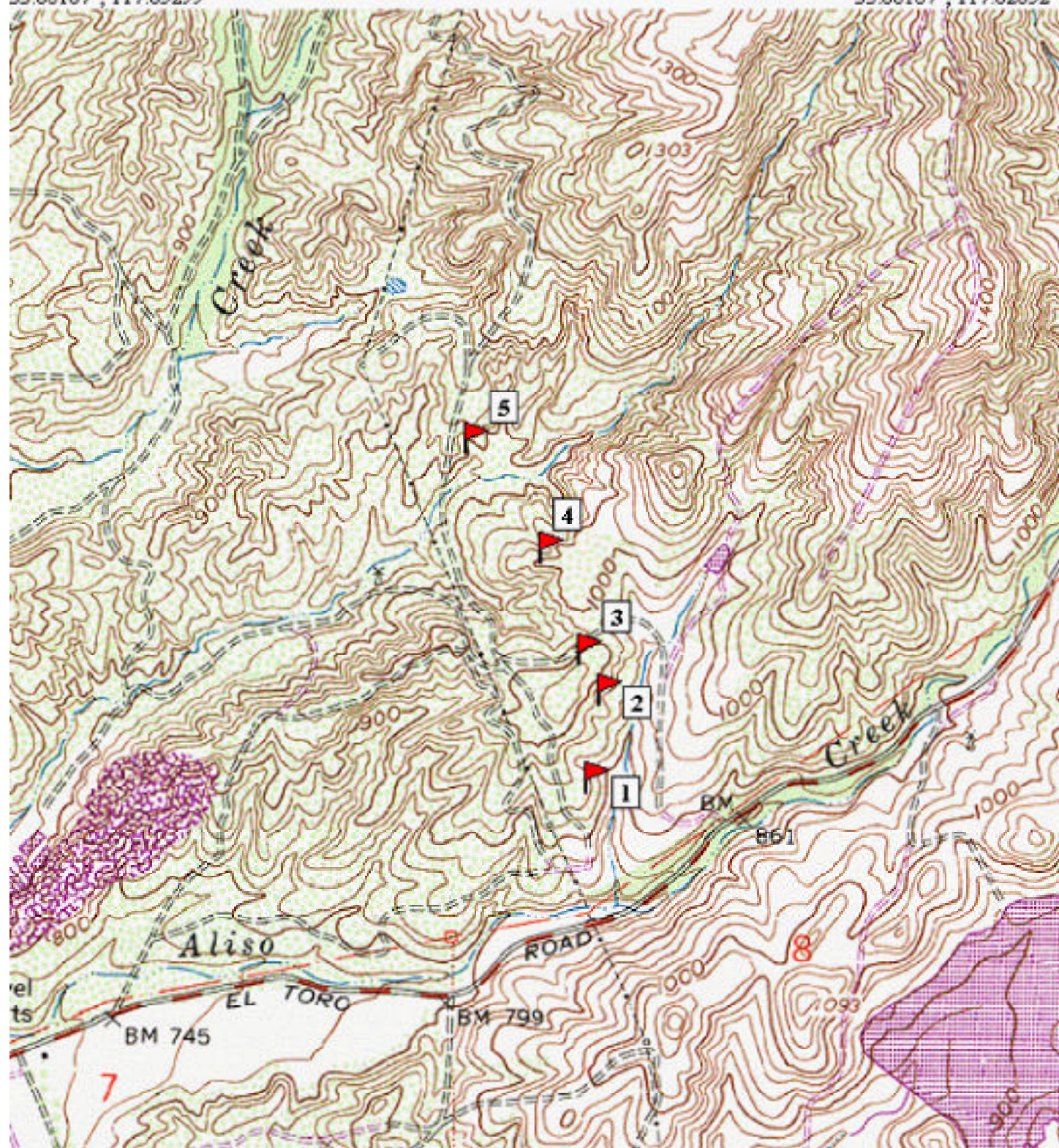
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

[illegible]

Edison

33.68167°, 117.65299°

33.68167°, 117.62652°



33.65785°, 117.65299° NAD83

33.65785°, 117.62652°

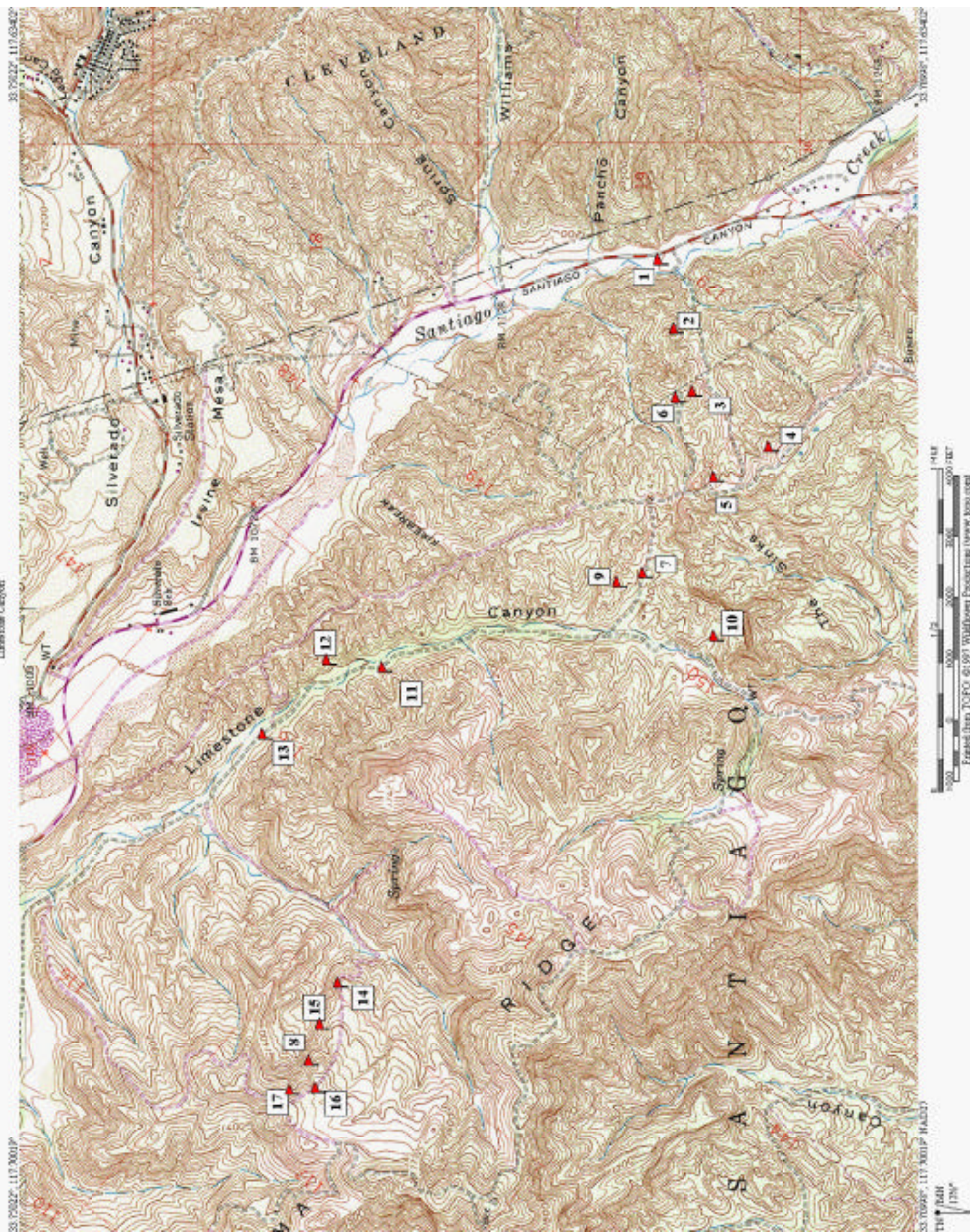
TN★/MN
13½°

0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site: Edison	Total 7 Sample Periods	Array Number					
Common Name	Scientific Name	1	2	3	4	5	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>						
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>						
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina eschscholtzi</i>						
Large-Blotched Salamander	<i>Ensatina klauberi</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>						
Pacific Treefrog	<i>Hyla regilla</i>						
Western Toad	<i>Bufo boreas</i>	2		1	3	9	15
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>		1				1
Western Pond Turtle	<i>Clemmys marmorata</i>						
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	3		2			5
Gilbert Skink	<i>Eumeces gilberti</i>						
Western Skink	<i>Eumeces skiltonianus</i>	1					1
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	1	3	2	5	8	19
Western Whiptail	<i>Cnemidophorus tigris</i>	1	5	1	4		11
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	10	2	10	6	3	31
Granite Spiny Lizard	<i>Sceloporus orcutti</i>						
Side-Blotched Lizard	<i>Uta stansburiana</i>	4	6	1	1	2	14
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>						
Rosy Boa	<i>Charina trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>						
Night Snake	<i>Hypsiglena torquata</i>						
California Kingsnake	<i>Lampropeltis getulus</i>	2					2
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>						
Striped Racer	<i>Masticophis lateralis</i>		1	1		1	3
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>						
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>						
California Black-Headed Snake	<i>Tantilla planiceps</i>						
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchelli</i>						
Red Diamond Rattlesnake	<i>Crotalus ruber</i>	1					1
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>						
	Number of Individuals	25	18	18	19	23	103
	Number of Species	9	6	7	5	5	11

Site Name:	Limestone Canyon					
County:	Orange County					
Responsible Parties:	The Nature Conservancy					
Contact:	Trish Smith					
Phone:	(714)832-5435					
Description: Elevation 327-470 meters. This study area is large and has many different habitats present. The bulk of our arrays are in coastal sage scrub, although some are in chamise chaparral, oak woodland and one is in a wash. Our arrays run a transect from Santiago Canyon, over the ridge in Limestone Canyon, and then back up the next ridge. Approximately 600 hectares are sampled by the 17 arrays. 15 of the arrays were damaged in the fire of September 1998 and were rebuilt. This site is part of the Central Plan for Orange County.						
Start dates for Sample Periods:						
	8/22/95	2/4/96	1/6/97	3/24/98	2/16/99	
	10/24/95	4/2/96	3/11/97	6/18/98	5/11/99	
		6/4/96	5/12/97	8/25/98	7/21/99	
		8/6/96	7/14/97	10/27/98	9/21/99	
		10/8/96	9/23/97		12/1/99	
			11/17/97			
Number of Sample Days:			210			
Location:						
Array	Lat. (N) dec.	Lon. (W) dec.	Datum			
1	33.7212417	117.6489140	NAD 83			
2	33.7202083	117.6522389	NAD 83			
3	33.7195388	117.6561080	NAD 83			
4	33.7162080	117.6589167	NAD 83			
5	33.7187167	117.6606000	NAD 83			
6	33.7203694	117.6562972	NAD 83			
7	33.7219972	117.6657861	NAD 83			
8	33.7368583	117.6922167	NAD 83			
9	33.7231100	117.6663700	NAD 83			
10	33.7187600	117.6692100	NAD 83			
11	33.7337278	117.6705333	NAD 83			
12	33.7360555	117.6704806	NAD 83			
13	33.7389444	117.6744410	NAD 83			
14	33.7358199	117.6877639	NAD 83			
15	33.7363028	117.6901444	NAD 83			
16	33.7365550	117.6935833	NAD 83			
17	33.7376888	117.6937694	NAD 83			

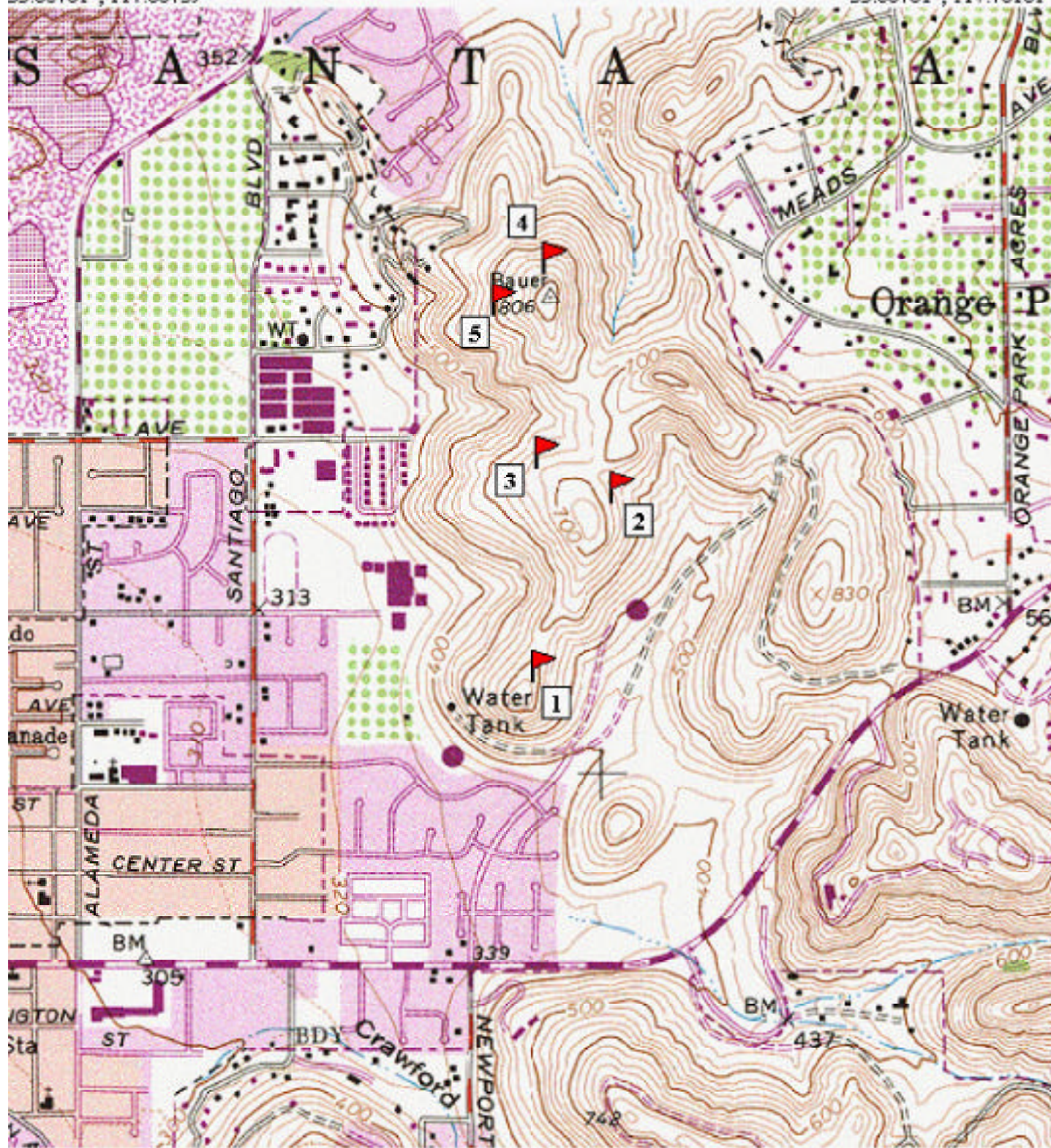


Site Name:	Orange Hills					
County:	Orange County					
Responsible Parties:	Orange County Harbors, Beaches and Parks					
Contact:	Mike Reeder					
Phone:	(714)538-4400					
Description: Elevation 120 - 240 meters. The Orange Hills study site is a small fragment surrounded by urban development. Habitats being sampled in this hilly area include coastal sage scrub, cactus patches, and rocky outcrops. Disturbance includes hiking paths, a fire ring, along with other signs of high visitation. This site serves as a small fragment to test reserve design and as a Central Fragment in the Nature Reserve of Orange County.						
Start dates for Sample Periods:						
	6/18/98	2/15/99				
	8/25/98	5/11/99				
	10/27/98	7/21/99				
		9/21/99				
Number of Sample Days:		70				
Location:						
Array	Lat. (N) dec.	Lon. (W) dec.	Datum			
1	33.7936663	117.7933764	NAD 27			
2	33.7974066	117.7913482	NAD 27			
3	33.7981216	117.7933186	NAD 27			
4	33.8019825	117.7929944	NAD 27			
5	33.8011812	117.7944483	NAD 27			

Orange Hills

33.80761°, 117.80739°

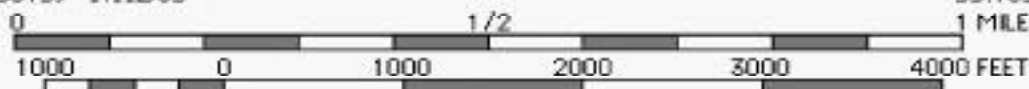
33.80761°, 117.78101°



33.78379°, 117.80739° NAD83

33.78379°, 117.78101°

TN ★ / MN
13 1/2°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

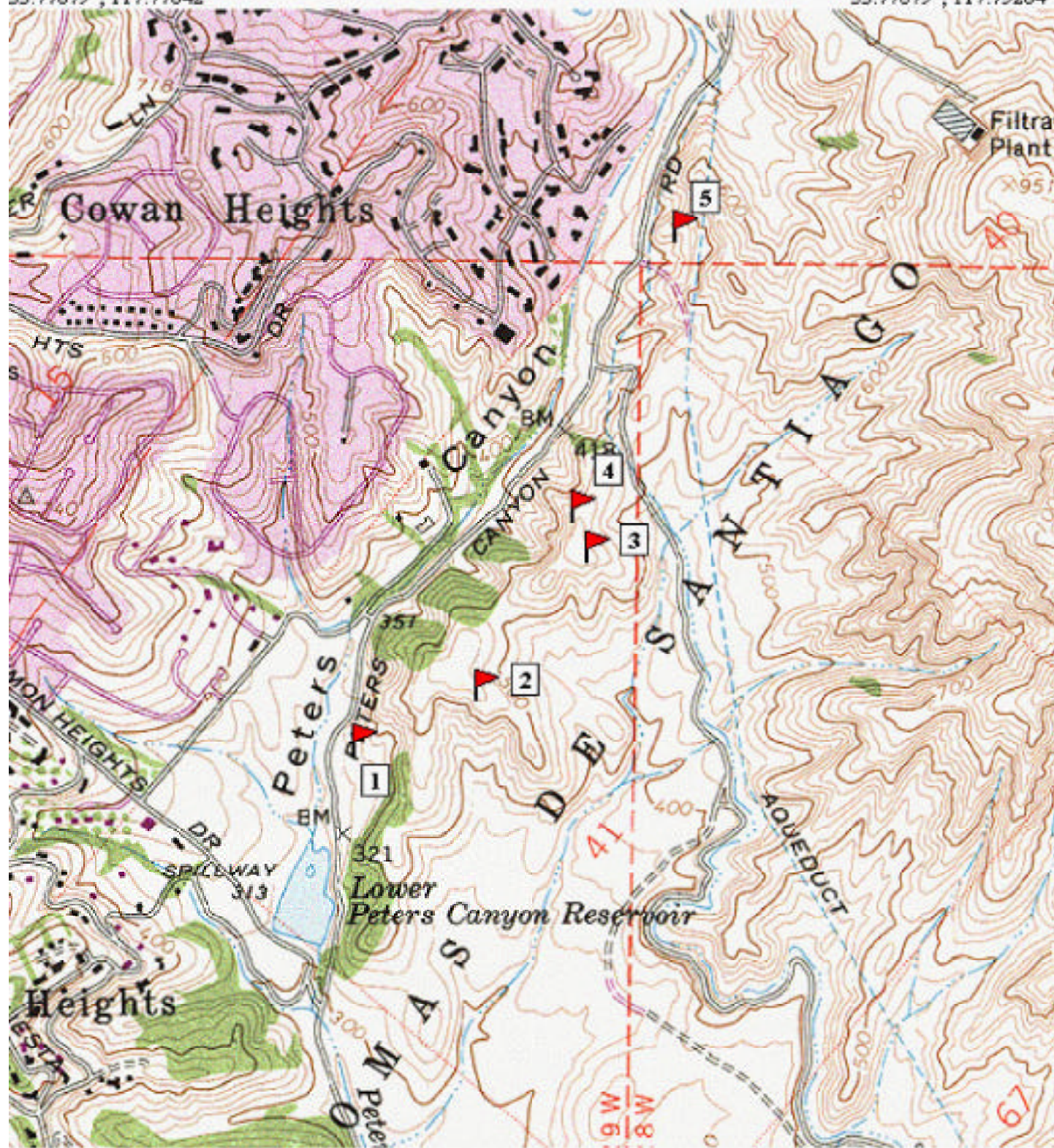
Site: Orange Hills	Total 7 Sample Periods	Array Number					
Common Name	Scientific Name	1	2	3	4	5	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>						
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>			2			2
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina eschscholtzi</i>						
Large-Blotched Salamander	<i>Ensatina klauberi</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>						
Pacific Treefrog	<i>Hyla regilla</i>						
Western Toad	<i>Bufo boreas</i>						
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>						
Western Pond Turtle	<i>Clemmys marmorata</i>						
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>			2		2	4
Gilbert Skink	<i>Eumeces gilberti</i>						
Western Skink	<i>Eumeces skiltonianus</i>			15	1	1	17
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	14			1	11	26
Western Whiptail	<i>Cnemidophorus tigris</i>	1					1
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	12	3	11	2	4	32
Granite Spiny Lizard	<i>Sceloporus orcutti</i>						
Side-Blotched Lizard	<i>Uta stansburiana</i>				2	1	3
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>	1					1
Rosy Boa	<i>Charina trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>				1		1
Night Snake	<i>Hypsiglena torquata</i>						
California Kingsnake	<i>Lampropeltis getulus</i>			1			1
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>						
Striped Racer	<i>Masticophis lateralis</i>	1	3	1		3	8
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>						
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>						
California Black-Headed Snake	<i>Tantilla planiceps</i>				1		1
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchelli</i>						
Red Diamond Rattlesnake	<i>Crotalus ruber</i>						
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>						
	Number of Individuals	29	6	32	8	22	97
	Number of Species	5	2	6	6	6	12

[illegible]

Peters Canyon

33.77879°, 117.77842°

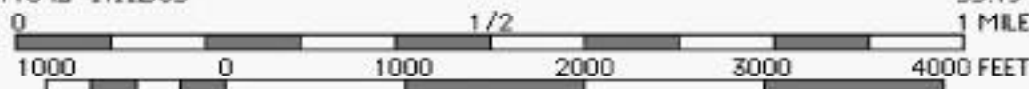
33.77879°, 117.75204°



33.75498°, 117.77842° NAD83

33.75498°, 117.75204°

TN * MN
13 1/2°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

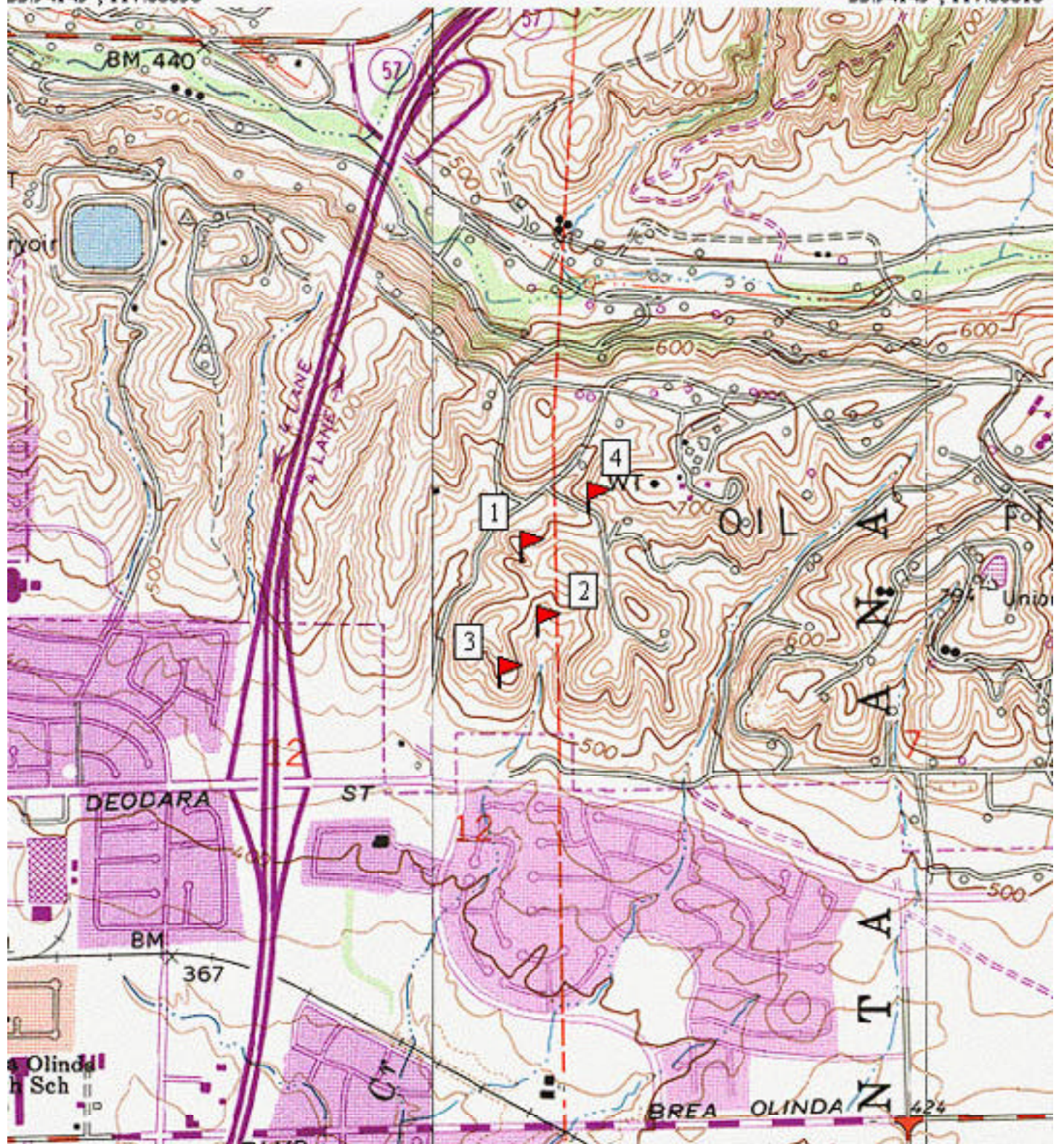
Site: Peters Canyon	Total 7 Sample Periods	Array Number					
Common Name	Scientific Name	1	2	3	4	5	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>	1					1
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	1	6		1		8
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina eschscholtzi</i>						
Large-Blotched Salamander	<i>Ensatina klauberi</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>						
Pacific Treefrog	<i>Hyla regilla</i>	2					2
Western Toad	<i>Bufo boreas</i>	1					1
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>						
Western Pond Turtle	<i>Clemmys marmorata</i>						
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	3	1		3	1	8
Gilbert Skink	<i>Eumeces gilberti</i>						
Western Skink	<i>Eumeces skiltonianus</i>	1	2		3		6
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	5	27	52	16	24	124
Western Whiptail	<i>Cnemidophorus tigris</i>						
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	13	8	4	5	6	36
Granite Spiny Lizard	<i>Sceloporus orcutti</i>						
Side-Blotched Lizard	<i>Uta stansburiana</i>	1	7	21	4	2	36
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>					1	1
Rosy Boa	<i>Charina trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>						
Night Snake	<i>Hypsiglena torquata</i>						
California Kingsnake	<i>Lampropeltis getulus</i>	1		1			2
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>						
Striped Racer	<i>Masticophis lateralis</i>		1	1	2	2	6
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>						
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>			1	1		2
California Black-Headed Snake	<i>Tantilla planiceps</i>						
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchelli</i>						
Red Diamond Rattlesnake	<i>Crotalus ruber</i>					1	1
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>	1				13	14
	Number of Individuals	30	52	80	35	50	248
	Number of Species	11	7	6	8	8	15

Site Name:	Puente Hills				
County:	Orange County				
Responsible Parties:	Puente Hills Native Habitat Authority				
Contact:	Ken Hughs				
Phone:	(310)454-1395 ext140				
Description: The arrays making up this study area are divided into four separate locations, Powder Canyon, Sycamore Canyon, property near Freeway 57 and Pathfinder, and several on Torch Operating Systems land. Habitat being sampled include oak and walnut woodland, coastal sage scrub, grassland, and chaparral. This site is part of the Whittier Hills Corridor Study.					
Start dates for Sample Periods:					
	4/21/98	2/9/99			
	6/23/98	5/5/99			
	8/26/98	7/7/99			
	10/27/98	9/8/99			
		11/10/99			
Number of Sample Days:		90			
Location:					
Array	Lat. (N) dec.	Lon. (W) dec.	Datum		
1	33.9299	117.87364	NAD 83		
2	33.92837	117.87323	NAD 83		
3	33.92727	117.87429	NAD 83		
4	33.93089	117.87323	NAD 83		
5	33.9792712	117.8454247	NAD 83		
6	33.9785471	117.8436125	NAD 83		
7	33.9802262	117.8443454	NAD 83		
8	33.9664494	117.9214288	NAD 83		
9	33.9681106	117.923472	NAD 83		
10	33.9690131	117.9268786	NAD 83		
11	33.9688638	117.9288275	NAD 83		
12	33.9964205	118.0351262	NAD 83		
13	33.9985256	118.0339055	NAD 83		
14	33.9980853	118.0310091	NAD 83		
15	34.0001542	118.042463	NAD 83		
16	34.0026266	118.0435104	NAD 83		
17	34.0023314	118.03729	NAD 83		
18	34.0001077	118.0291478	NAD 83		
19	34.0027749	118.030495	NAD 83		

Puente Hills, Arrays #1-4

33.94145°, 117.88656°

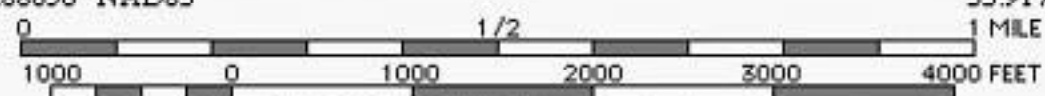
33.94145°, 117.86018°



33.91763°, 117.88656° NAD83

33.91763°, 117.86018°

TN
MN
14°

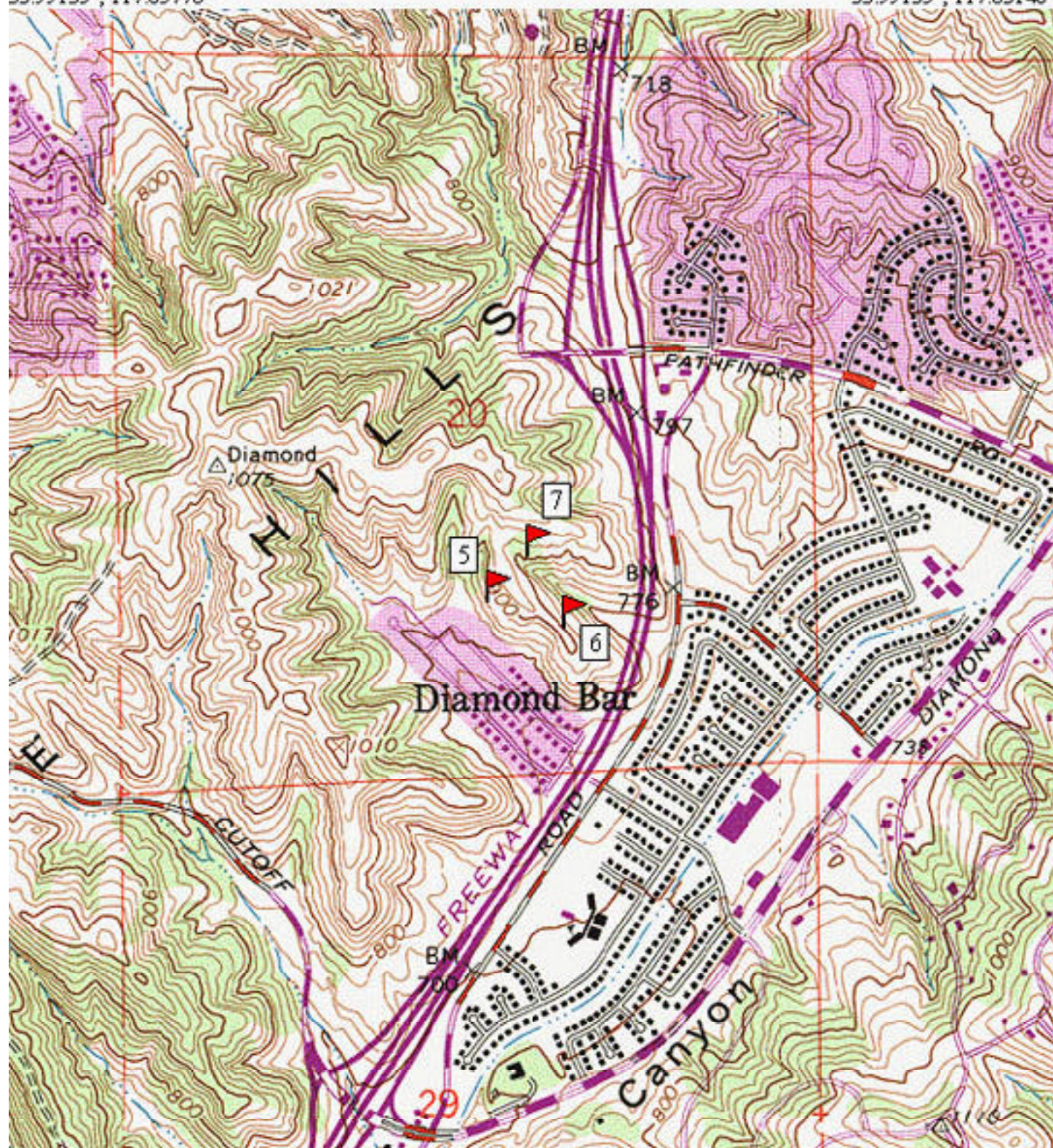


Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Puente Hills, Arrays #5-7

33.99135°, 117.85778°

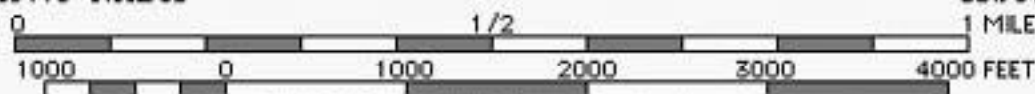
33.99135°, 117.83140°



33.96753°, 117.85778° NAD83

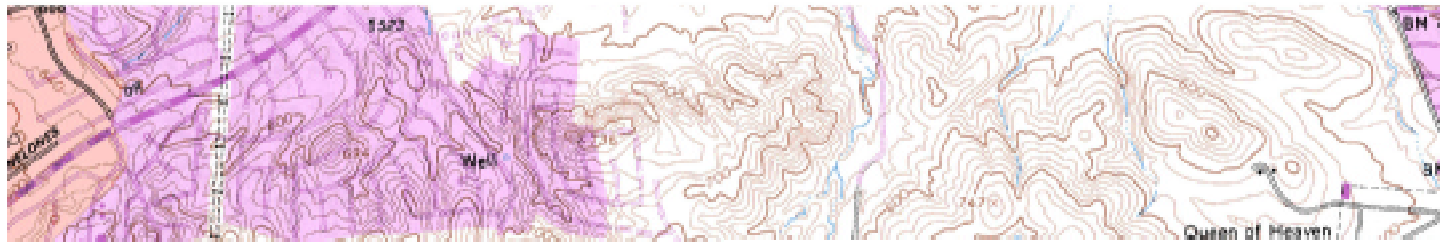
33.96753°, 117.83140°

TN * MN
14°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

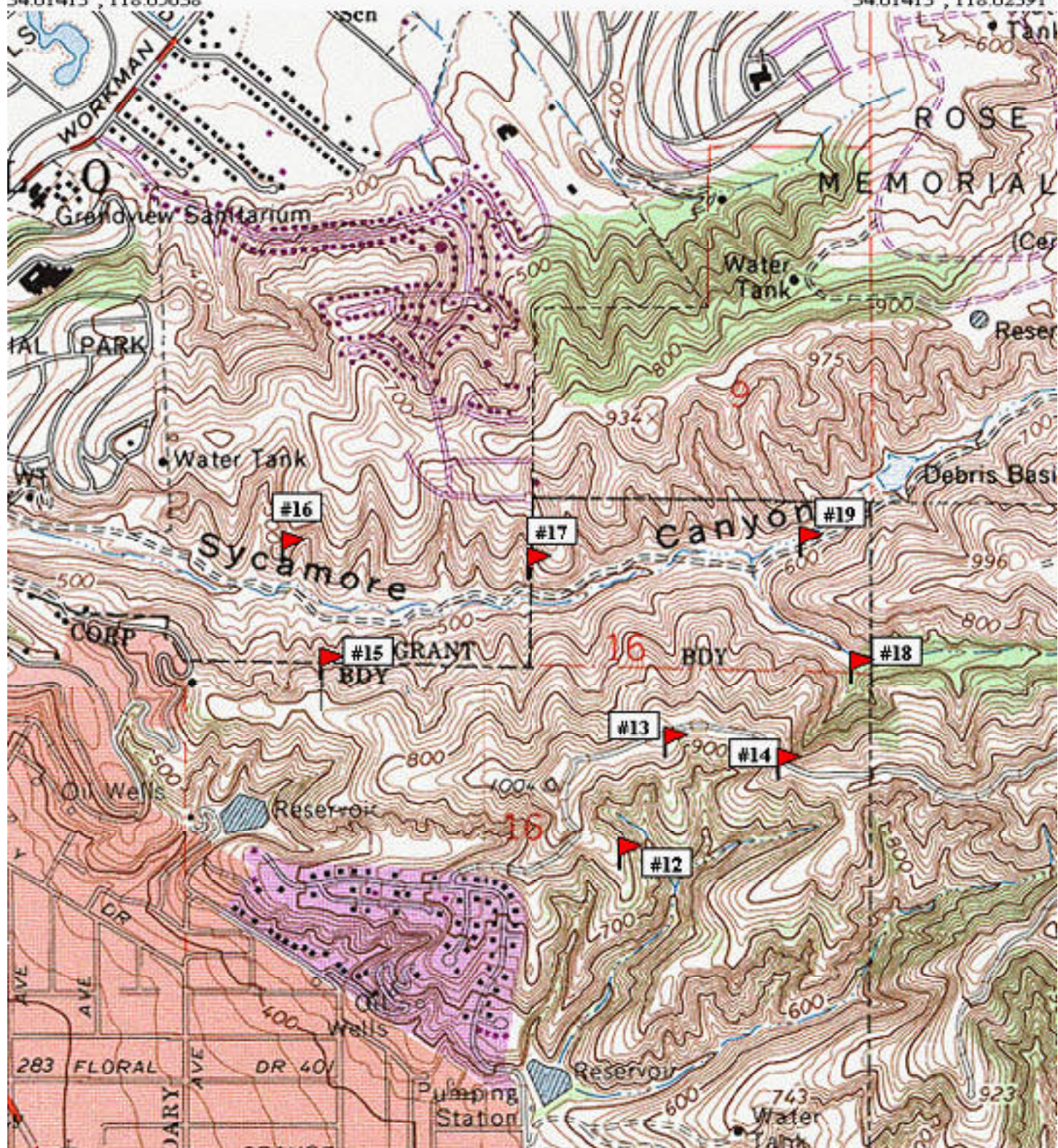
Puente Hills, Arrays #8-11



Puente Hills, Arrays #12-19

34.01413°, 118.05038°

34.01413°, 118.02391°



33.99031°, 118.05038° NAD83

33.99031°, 118.02391°

TN * /MN
14°



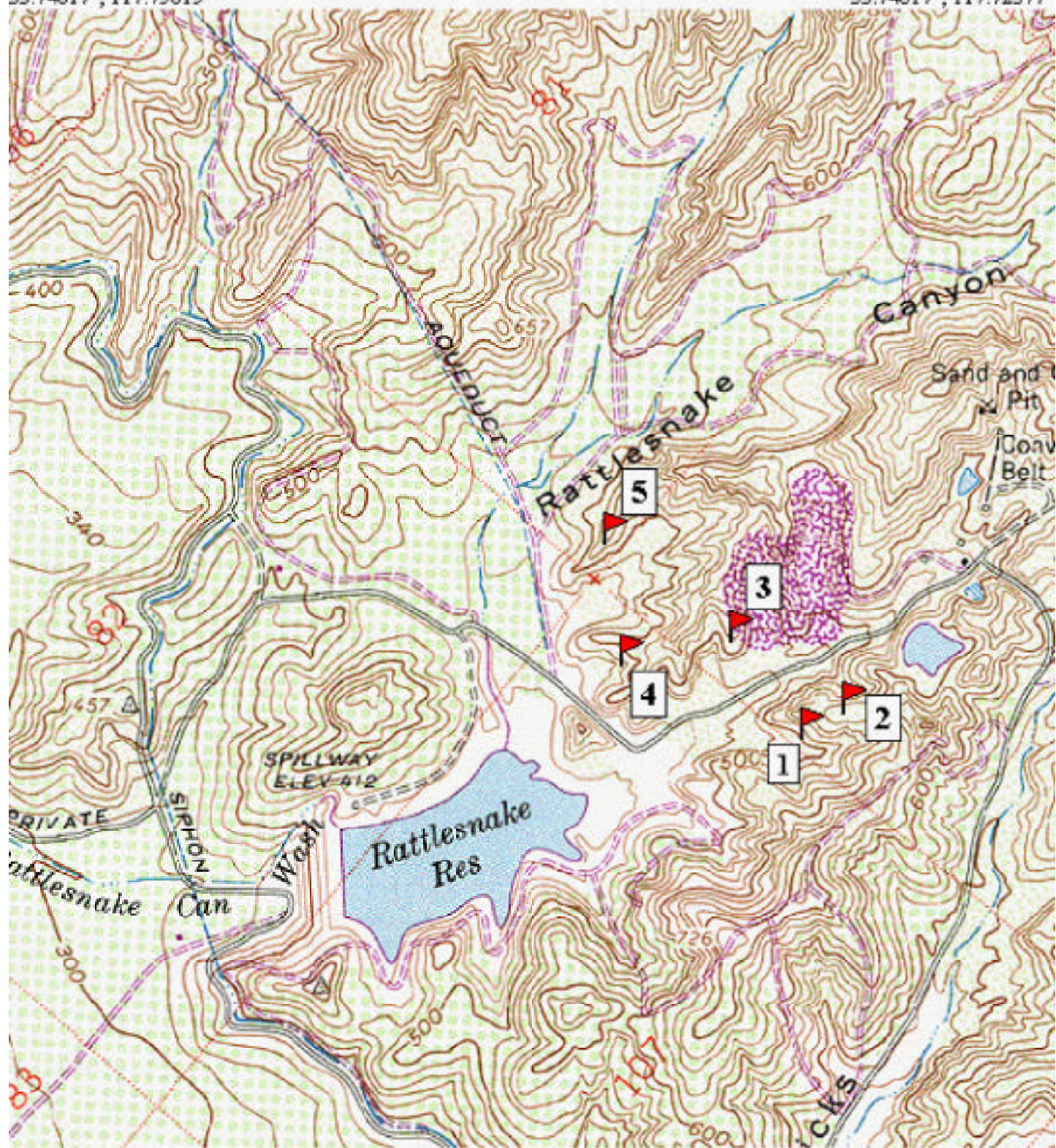
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site Name:	Rattlesnake Reservoir					
County:	Orange County					
Responsible Parties:	The Nature Conservancy					
Contact:	Trish Smith					
Phone:	(714)832-5435					
Description: To access the five arrays that make up the Rattlesnake Reservoir study site, requires driving through an avocado ranch. The habitat at the arrays is predominately coastal sage scrub. There is little visitation to this patch of land. Currently a Central Edge Site of the Nature Reserve of Orange County, it is due to become a fragment.						

Rattlesnake

33.74617°, 117.75015°

33.74617°, 117.72377°



33.72235°, 117.75015° NAD83

33.72235°, 117.72377°

TN / MN
13 1/2°

0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

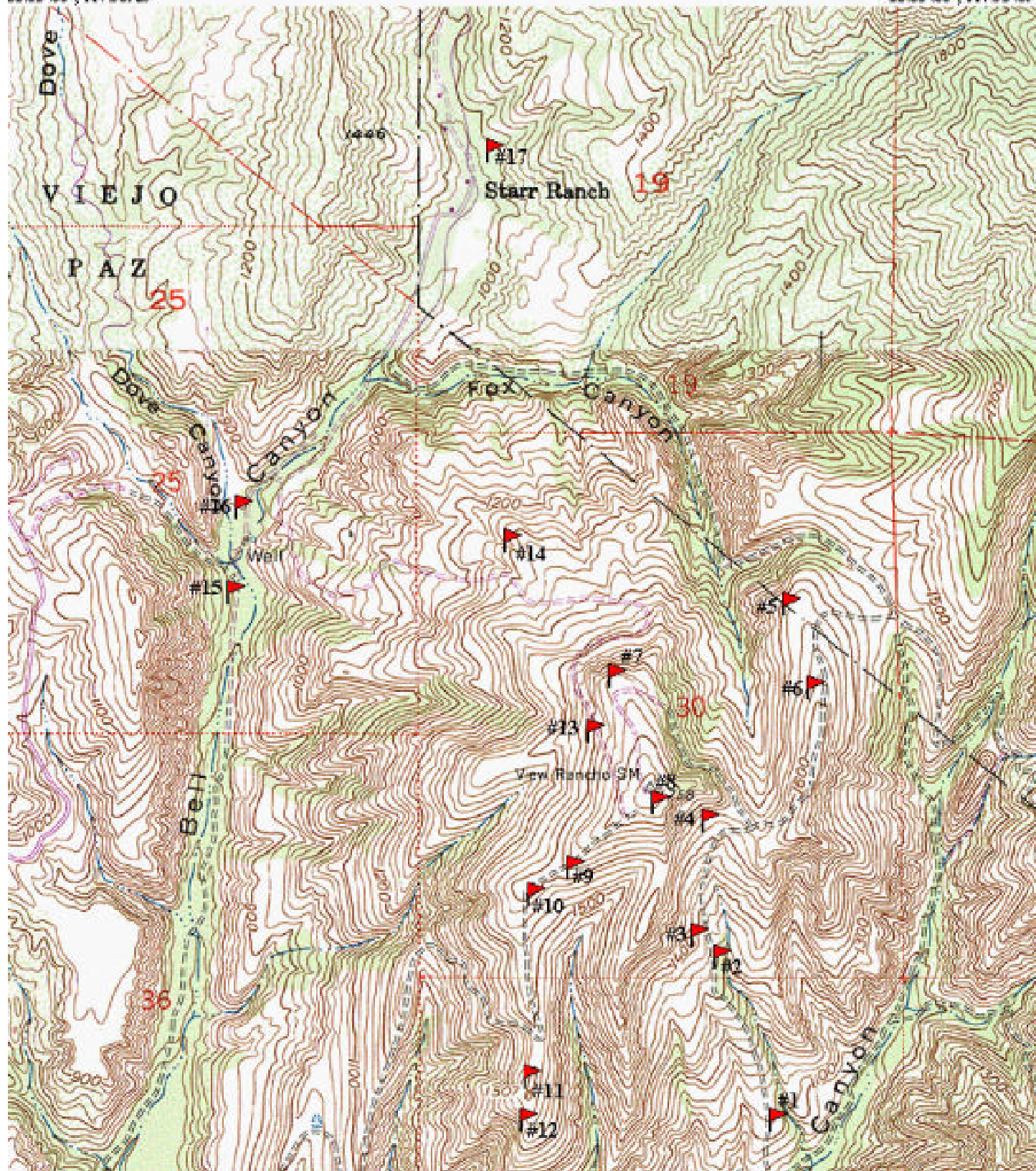
Site: Rattlesnake	Total 7 Sample Periods	Array Number					Total
Common Name	Scientific Name	1	2	3	4	5	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>						
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>			2			2
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina eschscholtzi</i>						
Large-Blotched Salamander	<i>Ensatina klauberi</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>						
Pacific Treefrog	<i>Hyla regilla</i>			1			1
Western Toad	<i>Bufo boreas</i>	3	5	3	1		12
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>						
Western Pond Turtle	<i>Clemmys marmorata</i>						
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>			1	1		2
Gilbert Skink	<i>Eumeces gilberti</i>						
Western Skink	<i>Eumeces skiltonianus</i>						
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	10	22	32	5	29	98
Western Whiptail	<i>Cnemidophorus tigris</i>						
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	13	4	4	6	1	28
Granite Spiny Lizard	<i>Sceloporus orcutti</i>						
Side-Blotched Lizard	<i>Uta stansburiana</i>	2	3			9	14
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>						
Rosy Boa	<i>Lichanura trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>				1		1
Night Snake	<i>Hypsiglena torquata</i>						
California Kingsnake	<i>Lampropeltis getulus</i>	1		1			2
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>						
Striped Racer	<i>Masticophis lateralis</i>				1	4	5
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>		1		1		2
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>						
California Black-Headed Snake	<i>Tantilla planiceps</i>						
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchelli</i>						
Red Diamond Rattlesnake	<i>Crotalus ruber</i>						
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>				1		1
Number of Individuals		29	35	44	17	43	168
Number of Species		5	5	7	8	4	12

Site Name:	Starr Ranch					
County:	Orange County					
Responsible Parties:	Audubon Society					
Contact:	Pete DeSimone					
Phone:	(714)858-0309					
Description: Elevation 252-530 meters. This site is large and continuous with the Santa Ana Mountains. The habitat is mostly coastal sage scrub mixed with oaks and grassland. We are sampling several habitat types here including wash and oak forest. This site has little human disturbance, and is part of the Southern Orange County planning area. 500 hectares are being sampled by the arrays at this site.						
Start dates for Sample Periods:						
	7/11/95	2/20/96	2/4/97	3/3/98	3/9/99	
	9/13/95	4/23/96	4/1/97	5/19/98	5/24/99	
	11/13/95	6/24/96	6/3/97	7/14/98	8/2/99	
		8/27/96	8/5/97	9/14/98	10/5/99	
		10/29/96	10/8/97	11/16/98		
			12/10/97			
Number of Sample Days: 224						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33°36'10.41"	117°32'39.38"	33.6028917	117.5442722	338	NAD 83
2	33°36'27.08"	117°32'46.08"	33.6075222	117.5461333	409	NAD 83
3	33°36'29.37"	117°32'48.91"	33.6081583	117.5469194	427	NAD 83
4	33°36'40.94"	117°32'47.61"	33.6113722	117.5465583	480	NAD 83
5	33°37'02.79"	117°32'37.66"	33.6174417	117.5437944	457	NAD 83
6	33°36'54.03"	117°32'34.77"	33.6150833	117.5429917	480	NAD 83
7	33°36'55.53"	117°32'59.60"	33.6154250	117.5498880	513	NAD 83
8	33°36'42.61"	117°32'53.68"	33.6118361	117.5482444	530	NAD 83
9	33°36'36.28"	117°33'04.15"	33.6100777	117.5511528	494	NAD 83
10	33°36'33.17"	117°33'08.91"	33.6092139	117.5524750	500	NAD 83
11	33°36'14.78"	117°33'09.24"	33.6041056	117.5525666	519	NAD 83
12	33°36'10.32"	117°33'09.94"	33.6028666	117.5527611	519	NAD 83
13	33°36'50.00"	117°33'01.69"	33.6138880	117.5504694	484	NAD 83
14	33°37'09.34"	117°33'11.81"	33.6192611	117.5532800	384	NAD 83
15	33°37'04.07"	117°33'45.95"	33.6177970	117.5627639	252	NAD 83
16	33°37'12.73"	117°33'44.87"	33.6202028	117.5624639	252	NAD 83
17	33°37'48.97"	117°33'14.14"	33.6302694	117.5539278	297	NAD 83

Starr Ranch

33.63466°, 117.56929°

33.63466°, 117.53409°



33.60174°, 117.56929° NAD27

33.60174°, 117.53409°

TN * MN
135°



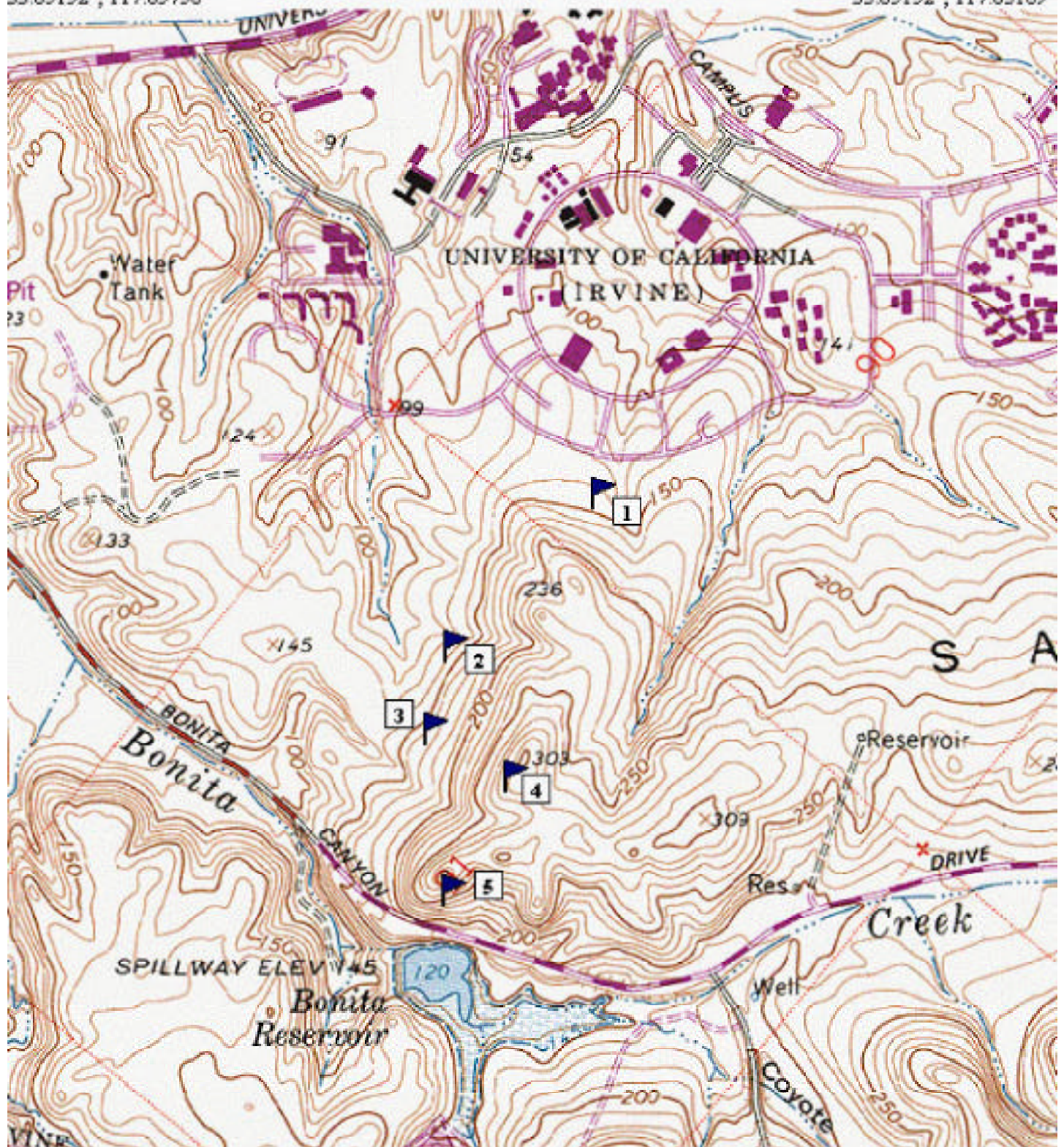
Printed from TOPOI ©1997 Wildflower Productions (www.topoi.com)

[illegible]

University of California, Irvine

33.65152°, 117.85756°

33.65152°, 117.83109°



33.62770°, 117.85756° NAD27

33.62770°, 117.83109°

TN
13%

0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

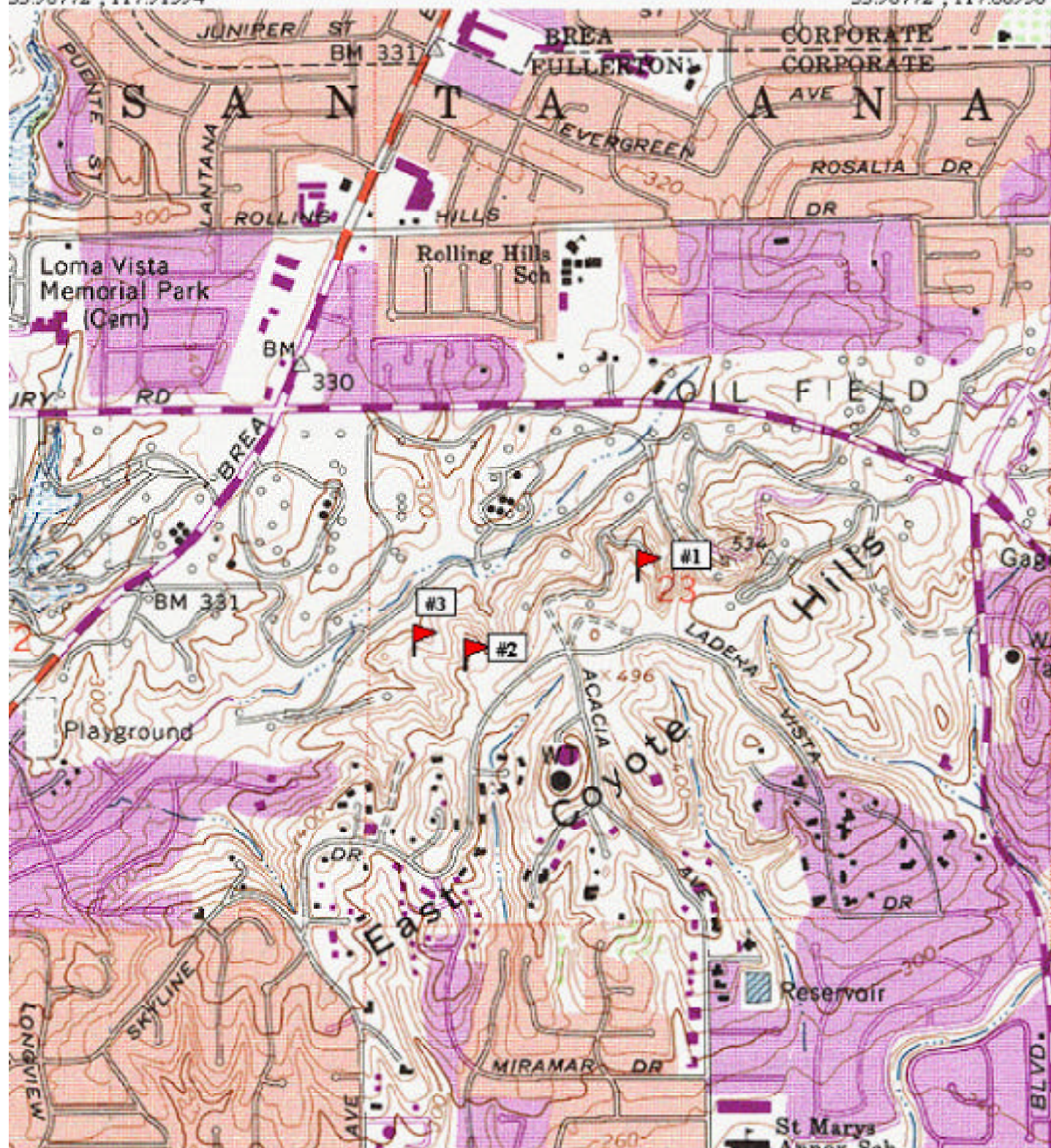
Site: UC, Irvine	Total 19 Sample Periods	Array Number					
Common Name	Scientific Name	1	2	3	4	5	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>						
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	1	5	1	1	2	10
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina eschscholtzi</i>						
Large-Blotched Salamander	<i>Ensatina klauberi</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>						
Pacific Treefrog	<i>Hyla regilla</i>						
Western Toad	<i>Bufo boreas</i>						
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>						
Western Pond Turtle	<i>Clemmys marmorata</i>						
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	19	46	35	16	10	126
Gilbert Skink	<i>Eumeces gilberti</i>						
Western Skink	<i>Eumeces skiltonianus</i>	3	44	25	28	5	105
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>		1				1
Western Whiptail	<i>Cnemidophorus tigris</i>						
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	20	128	46	34	20	248
Granite Spiny Lizard	<i>Sceloporus orcutti</i>						
Side-Blotched Lizard	<i>Uta stansburiana</i>	1	2	5		5	13
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>						
Rosy Boa	<i>Charina trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>		2		1		3
Night Snake	<i>Hypsiglena torquata</i>						
California Kingsnake	<i>Lampropeltis getulus</i>	3	2		1		6
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>		1	1	3		5
Striped Racer	<i>Masticophis lateralis</i>						
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>		8	5	3	1	17
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>						
California Black-Headed Snake	<i>Tantilla planiceps</i>						
Two-striped Garter Snake	<i>Thamnophis hammondi</i>						
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchelli</i>						
Red Diamond Rattlesnake	<i>Crotalus ruber</i>						
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>						
	Number of Individuals	47	239	118	87	43	534
	Number of Species	6	10	7	8	6	10

[illegible]

Unocal

33.90772°, 117.91594°

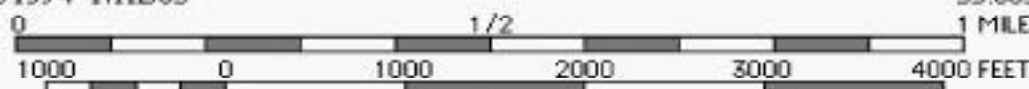
33.90772°, 117.88956°



33.88391°, 117.91594° NAD83

33.88391°, 117.88956°

TN
MN
14°



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

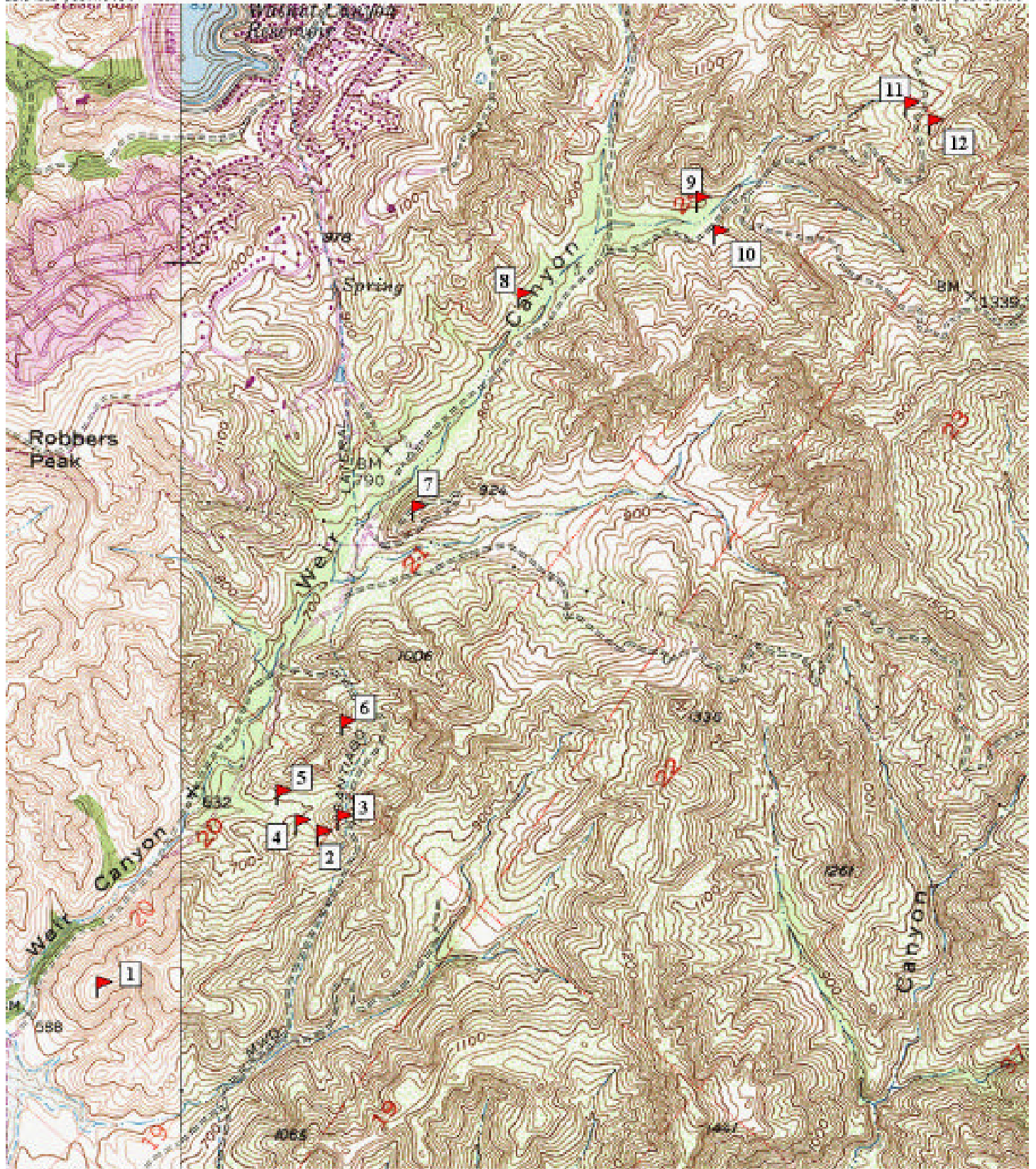
Site: Unocal	Total 9 Sample Periods	Array Number			
Common Name	Scientific Name	1	2	3	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>		1	1	2
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>		1		1
Arboreal Salamander	<i>Aneides lugubris</i>				
Monterey Salamander	<i>Ensatina eschscholtzi</i>				
Large-Blotched Salamander	<i>Ensatina klauberi</i>				
California Newt	<i>Taricha torosa</i>				
California Treefrog	<i>Hyla cadaverina</i>				
Pacific Treefrog	<i>Hyla regilla</i>	2	3	1	6
Western Toad	<i>Bufo boreas</i>	1	2		3
Arroyo Toad	<i>Bufo microscaphus</i>				
Red-Spotted Toad	<i>Bufo punctatus</i>				
Red-Legged Frog	<i>Rana aurora</i>				
Bullfrog	<i>Rana catesbeiana</i>				
African Clawed Frog	<i>Xenopus laevis</i>				
Western Spadefoot Toad	<i>Spea hammondi</i>				
Western Pond Turtle	<i>Clemmys marmorata</i>				
Slider	<i>Trachemys sp.</i>				
Western Banded Gecko	<i>Coleonyx variegatus</i>				
Granite Night Lizard	<i>Xantusia henshawi</i>				
Desert Night Lizard	<i>Xantusia vigilis</i>				
California Legless Lizard	<i>Anniella pulchra</i>				
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	11	4	2	17
Gilbert Skink	<i>Eumeces gilberti</i>				
Western Skink	<i>Eumeces skiltonianus</i>	15	6	9	31
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>				
Western Whiptail	<i>Cnemidophorus tigris</i>				
Desert Spiny Lizard	<i>Sceloporus magister</i>				
Sagebrush Lizard	<i>Sceloporus graciosus</i>				
Western Fence Lizard	<i>Sceloporus occidentalis</i>	23	21	29	73
Granite Spiny Lizard	<i>Sceloporus orcutti</i>				
Side-Blotched Lizard	<i>Uta stansburiana</i>	85	9	4	98
Coast Horned Lizard	<i>Phrynosoma coronatum</i>				
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>				
Western Blind Snake	<i>Leptotyphlops humilis</i>				
Rosy Boa	<i>Charina trivirgata</i>				
Glossy Snake	<i>Arizona elegans</i>				
Yellow-Bellied Racer	<i>Coluber constrictor</i>		1		1
Western Ringneck Snake	<i>Diadophis punctatus</i>				
Night Snake	<i>Hypsiglena torquata</i>				
California Kingsnake	<i>Lampropeltis getulus</i>	1	2		3
California Mountain Kingsnake	<i>Lampropeltis zonata</i>				
Coachwhip/Red Racer	<i>Masticophis flagellum</i>				
Striped Racer	<i>Masticophis lateralis</i>				
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>				
Long-nosed Snake	<i>Rhinocheilus lecontei</i>				
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>				
California Black-Headed Snake	<i>Tantilla planiceps</i>				
Two-striped Garter Snake	<i>Thamnophis hammondi</i>				
Common Garter Snake	<i>Thamnophis sirtalis</i>				
Lyre Snake	<i>Trimorphodon biscutatus</i>				
Speckled Rattlesnake	<i>Crotalus mitchelli</i>				
Red Diamond Rattlesnake	<i>Crotalus ruber</i>				
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>				
	Number of Individuals	138	50	46	235
	Number of Species	7	10	6	10

[illegible]

Wair Canyon

33.84163° 117.75764°

33.84163° 117.71798°



33.80415° 117.75764° NAD83

33.80415° 117.71798°

TN
13M



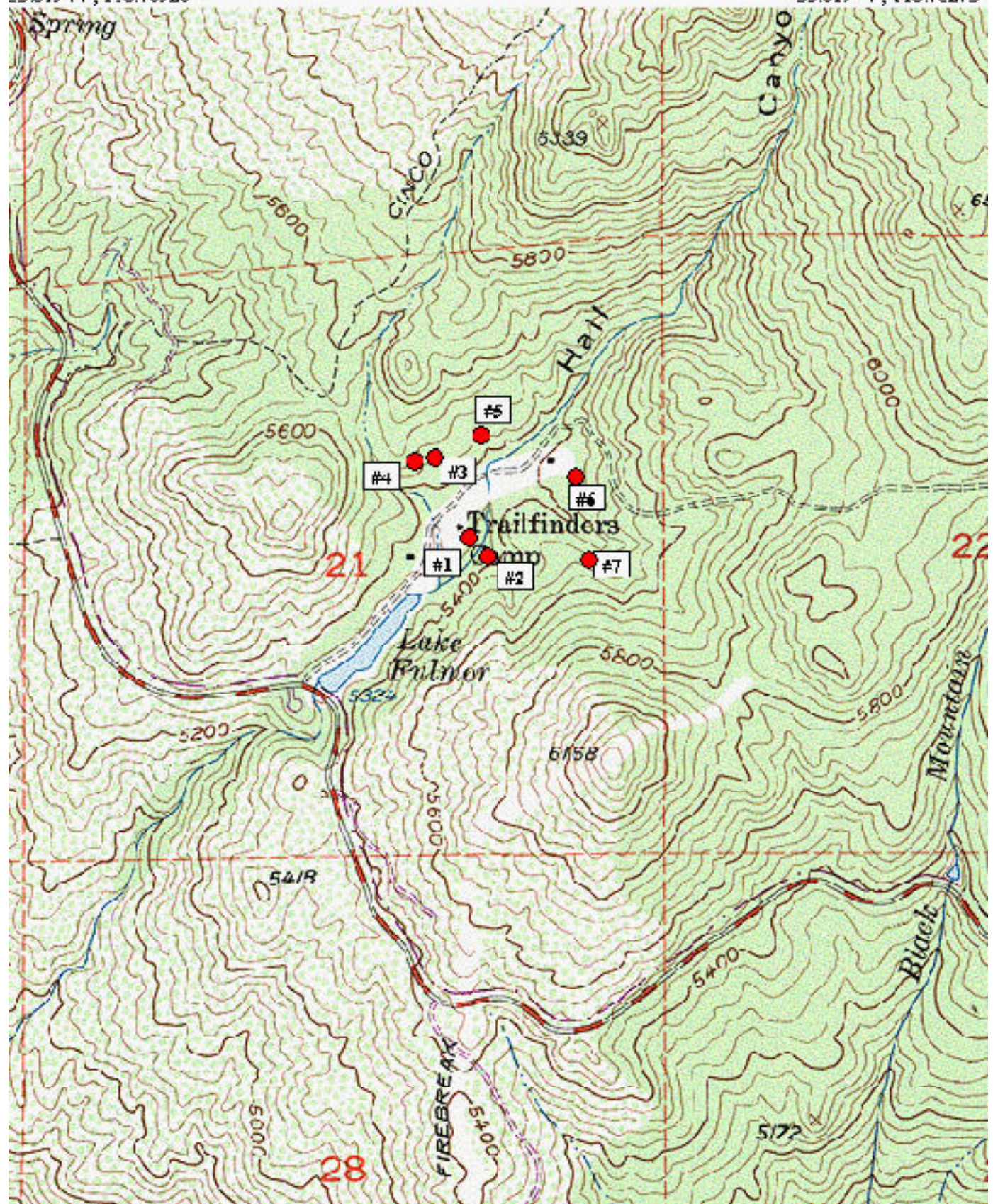
Printed from TOPOI ©1997 Wildflower Productions (www.topo.com)

[illegible]

James Reserve

33.81941°, 116.73920°

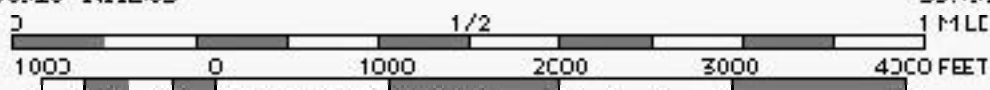
33.81941°, 116.76273°



33.79257°, 116.73920° NAD83

33.79257°, 116.76273°

TK ↑ MN
: 3 1/2"

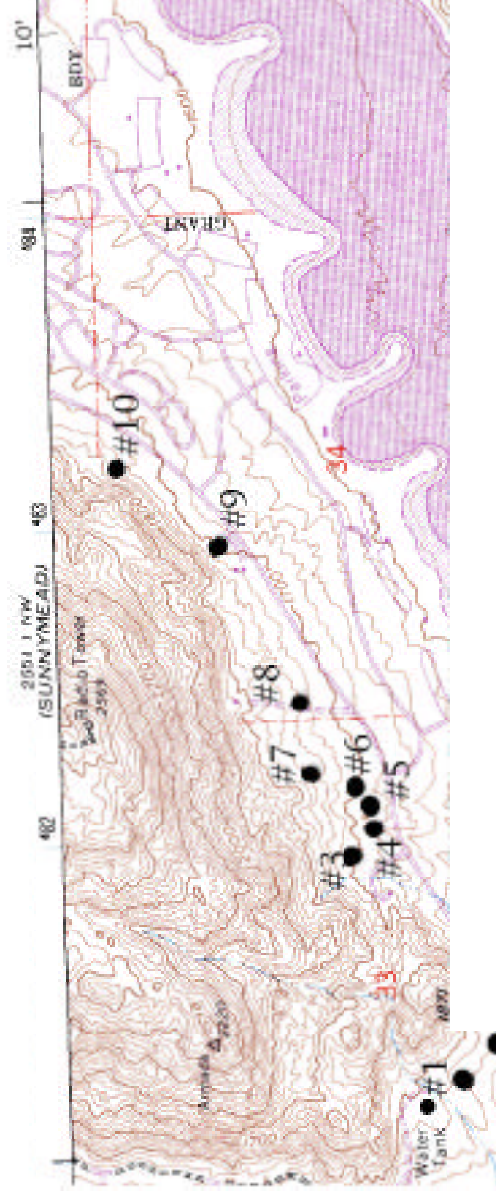


Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

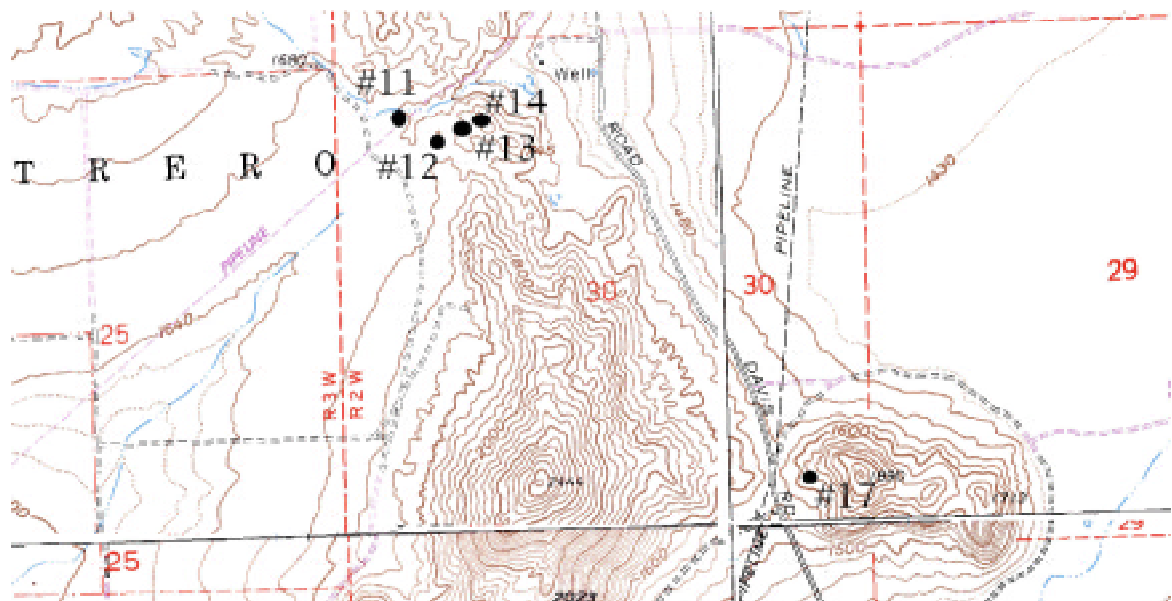
Site: James Reserve	Total 6 Sample Periods	Array Number							Total
Common Name	Scientific Name	1	2	3	4	5	6	7	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>								
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>								
Arboreal Salamander	<i>Aneides lugubris</i>								
Monterey Salamander	<i>Ensatina eschscholtzi</i>	6	10		4	6		2	28
Large-Blotched Salamander	<i>Ensatina klauberi</i>								
California Newt	<i>Taricha torosa</i>								
California Treefrog	<i>Hyla cadaverina</i>								
Pacific Treefrog	<i>Hyla regilla</i>								
Western Toad	<i>Bufo boreas</i>								
Arroyo Toad	<i>Bufo microscaphus</i>								
Red-Spotted Toad	<i>Bufo punctatus</i>								
Red-Legged Frog	<i>Rana aurora</i>								
Bullfrog	<i>Rana catesbeiana</i>								
African Clawed Frog	<i>Xenopus laevis</i>								
Western Spadefoot Toad	<i>Spea hammondi</i>								
Western Pond Turtle	<i>Clemmys marmorata</i>								
Slider	<i>Trachemys sp.</i>								
Western Banded Gecko	<i>Coleonyx variegatus</i>								
Granite Night Lizard	<i>Xantusia henshawi</i>								
Desert Night Lizard	<i>Xantusia vigilis</i>								
California Legless Lizard	<i>Anniella pulchra</i>								
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>			2		1			3
Gilbert Skink	<i>Eumeces gilberti</i>								
Western Skink	<i>Eumeces skiltonianus</i>			4	1		4		9
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>								
Western Whiptail	<i>Cnemidophorus tigris</i>			6	5			1	12
Desert Spiny Lizard	<i>Sceloporus magister</i>								
Sagebrush Lizard	<i>Sceloporus graciosus</i>	9	1	3			6	2	21
Western Fence Lizard	<i>Sceloporus occidentalis</i>	3	2	7	12	8	1		33
Granite Spiny Lizard	<i>Sceloporus orcutti</i>				1				1
Side-Blotched Lizard	<i>Uta stansburiana</i>		1		2				3
Coast Horned Lizard	<i>Phrynosoma coronatum</i>								
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>								
Western Blind Snake	<i>Leptotyphlops humilis</i>								
Rosy Boa	<i>Charina trivirgata</i>								
Glossy Snake	<i>Arizona elegans</i>								
Yellow-Bellied Racer	<i>Coluber constrictor</i>								
Western Ringneck Snake	<i>Diadophis punctatus</i>						1		1
Night Snake	<i>Hypsiglena torquata</i>								
California Kingsnake	<i>Lampropeltis getulus</i>								
California Mountain Kingsnake	<i>Lampropeltis zonata</i>								
Coachwhip/Red Racer	<i>Masticophis flagellum</i>								
Striped Racer	<i>Masticophis lateralis</i>			2					2
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>								
Long-nosed Snake	<i>Rhinocheilus lecontei</i>								
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>								
California Black-Headed Snake	<i>Tantilla planiceps</i>								
Two-striped Garter Snake	<i>Thamnophis hammondi</i>								
Common Garter Snake	<i>Thamnophis sirtalis</i>								
Lyre Snake	<i>Trimorphodon biscutatus</i>								
Speckled Rattlesnake	<i>Crotalus mitchelli</i>								
Red Diamond Rattlesnake	<i>Crotalus ruber</i>								
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>								
	Number of Individuals	18	14	24	25	15	12	5	113
	Number of Species	3	4	6	6	3	4	3	10

Site Name:	Lake Perris					
County:	Riverside					
Responsible Parties:	State Parks, California Department of Fish and Game					
Contact:	Geary Hund					
Phone:	(909)940-5617					
Description: Elevation 477-536 meters. This study area is very large and dominated by brittle bush (<i>Encelia farinosa</i>), with large areas of grassland and boulder fields. The majority of the arrays are on the south facing slope, although some are flat. There was a fire that burned two arrays in the summer of 1996, which were rebuilt. Approximately 880 hectares are covered by the arrays. This site is included in the Stephens Kangaroo Rat HCP.						
Start dates for Sample Periods:						
	7/11/95	2/19/96	1/7/97	2/19/98	1/26/99	
	9/12/95	4/23/96	3/11/97	4/22/98	5/11/99	
	11/13/95	6/24/96	5/13/97	6/23/98	7/21/99	
		8/26/96	6/3/97	8/25/98	10/6/99	
		10/28/96	7/15/97	10/26/98		
			9/22/97			
			11/17/97			
Number of Sample Days: 240						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33°51'49.83"	117°12'12.18"	33.8638417	117.2033833	482	NAD 83
2	33°51'46.91"	117°12'07.52"	33.8630306	117.2020888	478	NAD 83
3	33°52'01.72"	117°11'44.33"	33.8671444	117.1956472	525	NAD 83
4	33°51'58.97"	117°11'40.88"	33.8663806	117.1946888	516	NAD 83
5	33°52'03.41"	117°11'37.67"	33.8666680	117.1937972	533	NAD 83
6	33°52'01.22"	117°11'35.70"	33.8670056	117.1932500	523	NAD 83
7	33°52'05.80"	117°11'33.82"	33.8682777	117.1927278	536	NAD 83
8	33°52'06.96"	117°11'24.86"	33.8686000	117.1902389	532	NAD 83
9	33°52'15.40"	117°11'05.52"	33.8709444	117.1848666	514	NAD 83
10	33°52'25.71"	117°10'55.68"	33.8738083	117.1821333	535	NAD 83
11	33°53'11.93"	117°08'15.37"	33.8866472	117.1376028	503	NAD 83
12	33°53'09.92"	117°08'10.61"	33.8860888	117.1362806	501	NAD 83
13	33°53'11.21"	117°08'07.25"	33.8864472	117.1353472	509	NAD 83
14	33°53'11.35"	117°08'05.71"	33.8864861	117.1349194	507	NAD 83
15	33°50'42.56"	117°08'48.43"	33.8451555	117.1467861	477	NAD 83
16	33°50'44.74"	117°08'46.87"	33.8457611	117.1463528	479	NAD 83
17	33°52'35.53"	117°07'24.36"	33.8765361	117.1234333	527	NAD 83

Perris, Arrays #1-10



Perris, Arrays #11-14, & 17

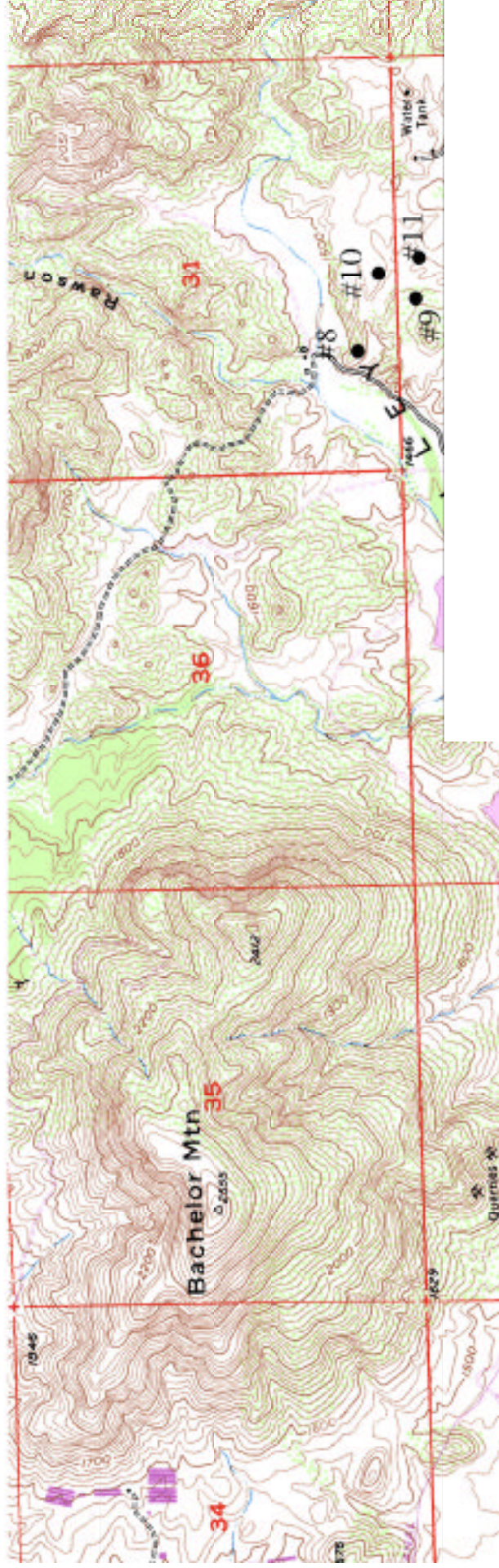


Perris, Arrays #15-16



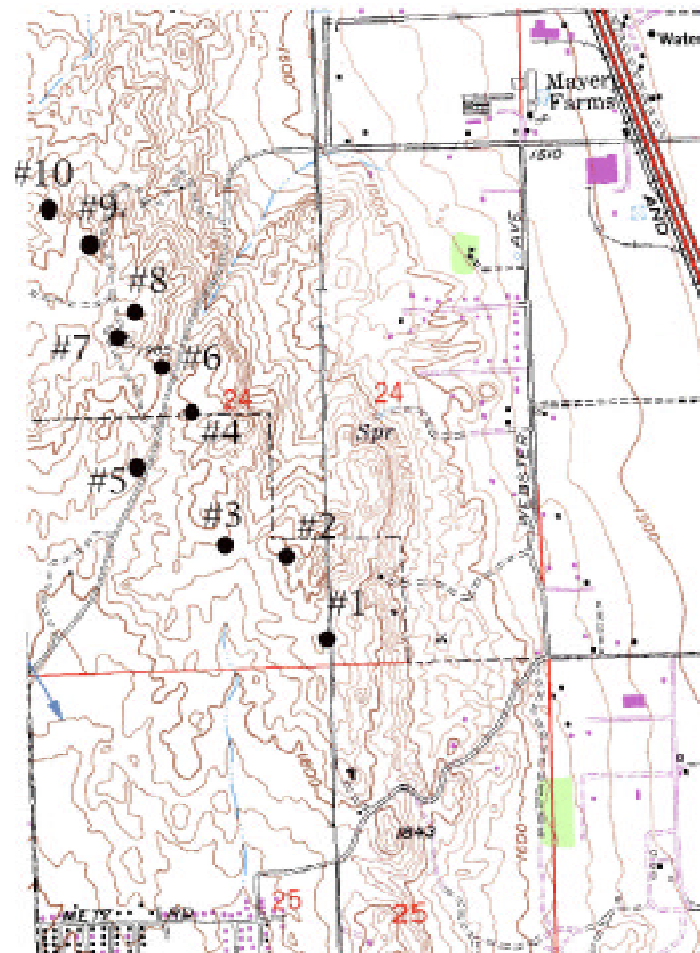
Site Name:	Lake Skinner					
County:	Riverside					
Responsible Parties:	Riverside Open Space					
Contact:	Tom Ash					
Phone:	(909)926-7416					
Description: Elevation 452-512 meters. This study area is very large and dominated by coastal sage scrub, with patches of chamise chaparral. About half of the arrays are south of the lake and these are dominated by buckwheat (<i>Eriogonum fasciculatum</i>), the rest of the arrays are east of the lake, where the habitat is more heterogeneous. This site is part of the Southwest Riverside County Multi Species Reserve. The sampling effort covers approximately 640 hectares.						
Start dates for Sample Periods:						
	8/1/95	1/30/96	2/19/97	1/28/98	12/7/98	
	10/23/95	4/2/96	4/21/97	3/31/98	4/7/99	
		6/4/96	6/24/97	6/2/98	6/1/99	
		8/5/96	9/2/97	8/4/98	8/10/99	
		10/8/96	10/28/97	10/5/98	10/27/99	
Number of Sample Days: 220						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33°34'46.34"	117°03'56.55"	33.5795389	117.0657083	465	NAD 83
2	33°34'43.84"	117°03'54.48"	33.5788444	117.0651333	481	NAD 83
3	33°34'38.66"	117°03'16.46"	33.5774056	117.0545722	469	NAD 83
4	33°34'40.85"	117°03'03.46"	33.5780139	117.0509611	473	NAD 83
5	33°34'30.82"	117°02'43.57"	33.5752278	117.0454361	498	NAD 83
6	33°34'37.39"	117°02'32.92"	33.5770528	117.0424777	508	NAD 83
7	33°34'36.08"	117°01'53.95"	33.5766888	117.0316528	482	NAD 83
8	33°35'59.13"	117°01'35.09"	33.5997583	117.0264139	464	NAD 83
9	33°35'53.34"	117°01'27.52"	33.5981500	117.0243111	466	NAD 83
10	33°35'56.17"	117°01'24.79"	33.5989361	117.0235528	467	NAD 83
11	33°35'51.99"	117°01'26.44"	33.5977750	117.0240111	464	NAD 83
12	33°35'40.93"	117°01'31.03"	33.5947028	117.0252944	468	NAD 83
13	33°35'23.56"	117°01'23.89"	33.5898777	117.0233028	452	NAD 83
14	33°34'54.90"	117°01'08.10"	33.5819167	117.0789167	485	NAD 83
15	33°34'57.87"	117°01'15.96"	33.5827417	117.0211000	479	NAD 83
16	33°35'13.08"	117°01'16.64"	33.5869666	117.0212888	501	NAD 83
17	33°35'09.23"	117°01'25.13"	33.5850639	117.0236472	514	NAD 83

Lake Skinner



[illegible]

Motte Rimrock Reserve

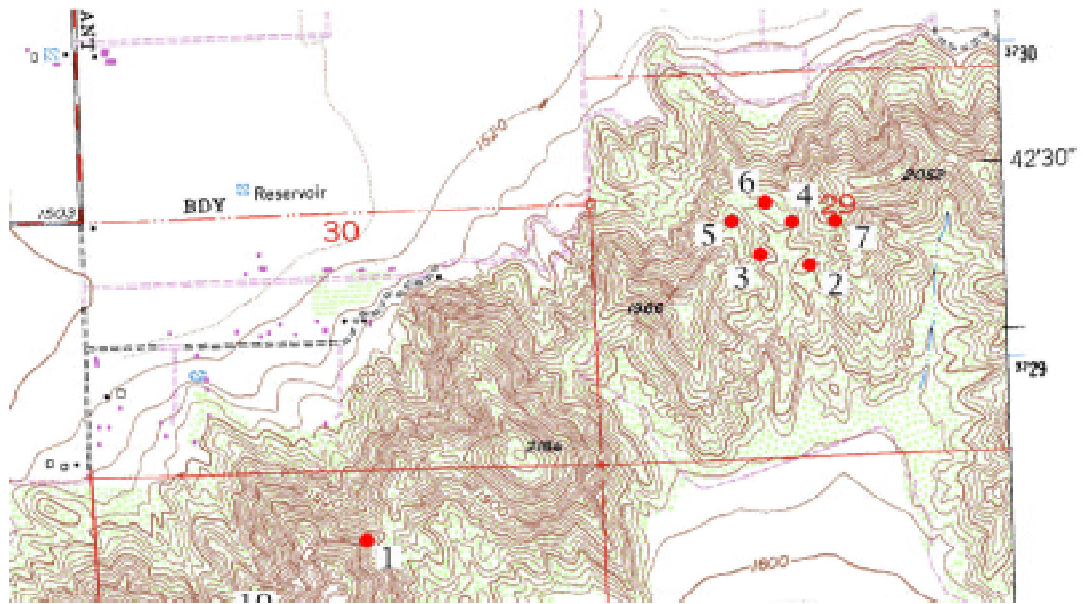


Scale: 1:25,000

Site: Motte Rimrock Reserve	Total 22 Sample Periods	Array Number										Total
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	2	1		3	5	1	7	1	3	1	24
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>		1	1	1				1	2	1	7
Western Toad	<i>Bufo boreas</i>	4	2	4	2		1	5		14	3	35
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>	5		1	2	3	1	1	2	1	7	23
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>		1	1		2	7	2				13
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>		1	3	3			3		1	1	12
Gilbert Skink	<i>Eumeces gilberti</i>											
Western Skink	<i>Eumeces skiltonianus</i>	2		1	4	1	2		2	3	5	20
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	70	52	44	60	50	42	54	27	75	33	509
Western Whiptail	<i>Cnemidophorus tigris</i>	16	21	30	9	41	35	69	21	58	47	347
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	6	10	5	4	15	3	4	10	15	9	81
Granite Spiny Lizard	<i>Sceloporus orcutti</i>	2	4		3	23	1	1	5	7	4	50
Side-Blotched Lizard	<i>Uta stansburiana</i>	16	26	28	27	36	26	76	14	23	23	295
Coast Horned Lizard	<i>Phrynosoma coronatum</i>				1		10	19	1	4	2	37
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>		1	1	2		2	7	6	6	2	27
Rosy Boa	<i>Charina trivirgata</i>		1			1					2	4
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>											
Night Snake	<i>Hypsiglena torquata</i>											
California Kingsnake	<i>Lampropeltis getulus</i>		2		1	1		1	2	4	2	13
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>	1	6	1	2	2	3	6	4	2	1	28
Striped Racer	<i>Masticophis lateralis</i>	3	5		1	6	3	1	4	1	2	26
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>					2						2
Long-nosed Snake	<i>Rhinocheilus lecontei</i>											
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>								1			1
California Black-Headed Snake	<i>Tantilla planiceps</i>											
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>						1					1
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>									1		1
Number of Individuals		127	134	120	125	188	138	256	101	221	145	1557
Number of Species		11	15	12	16	14	15	15	15	17	17	22

[illegible]

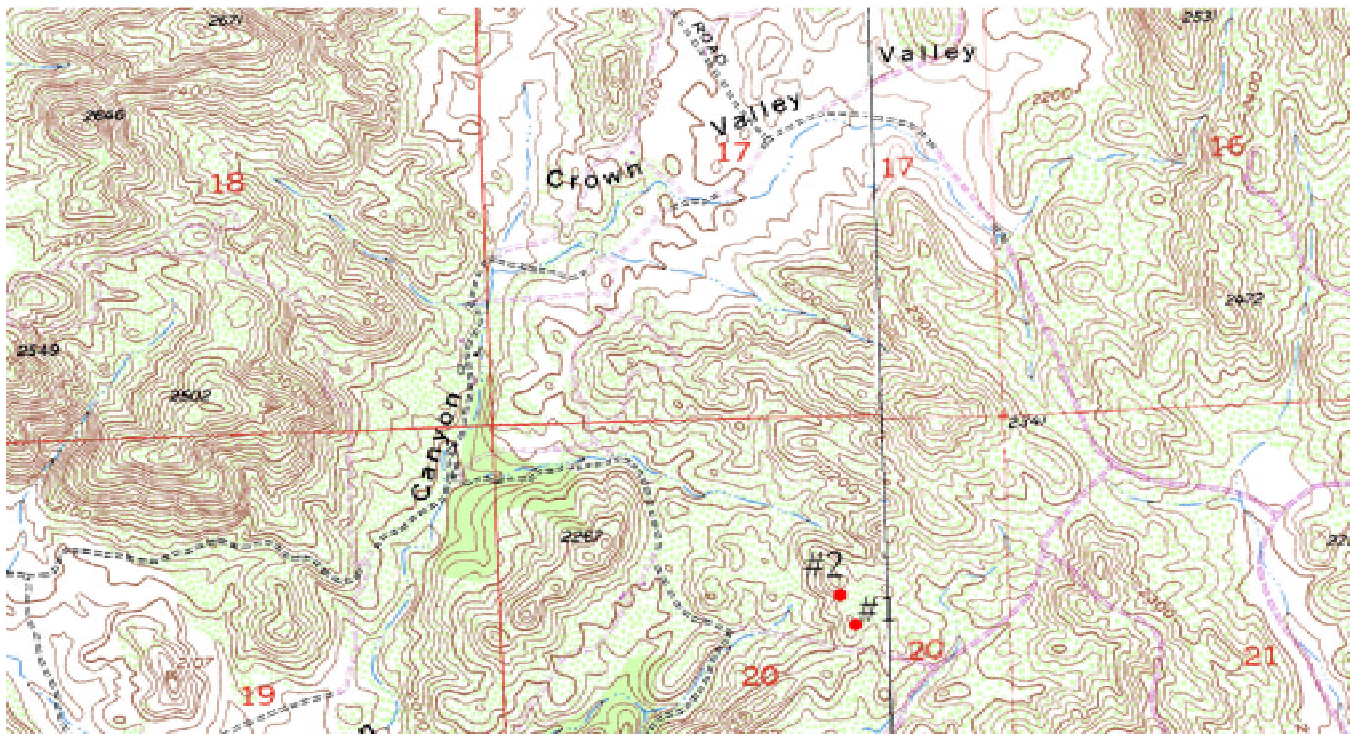
North Hills



Site: North Hills	Total 21 Sample Periods	Array Number										Total
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>									2		2
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>			2					1			3
Western Toad	<i>Bufo boreas</i>	1		6				1		3	1	12
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>		4	3	4	4	2				4	21
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>	3	17	7	2	2	13	14	1		1	60
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>									2		2
Gilbert Skink	<i>Eumeces gilberti</i>											
Western Skink	<i>Eumeces skiltonianus</i>	6	25	11	20	10	7	11	3	6	3	102
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	16	39	54	14	29	68	52	105	64	78	519
Western Whiptail	<i>Cnemidophorus tigris</i>	1						1	4	1		7
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>			1						1		2
Granite Spiny Lizard	<i>Sceloporus orcutti</i>											
Side-Blotched Lizard	<i>Uta stansburiana</i>	3	45	42	48	20	63	43	9	13	17	303
Coast Horned Lizard	<i>Phrynosoma coronatum</i>	4	1	1	1	1	2	1			1	12
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>			1		1	1		1		3	7
Rosy Boa	<i>Charina trivirgata</i>	2						1		1	1	5
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>											
Night Snake	<i>Hypsiglena torquata</i>											
California Kingsnake	<i>Lampropeltis getulus</i>					1	3	2	3	1		10
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>	2	6	7	5	3		2	2	1	9	37
Striped Racer	<i>Masticophis lateralis</i>		2					2		6	2	12
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1	5						4	2	2	14
Long-nosed Snake	<i>Rhinocheilus lecontei</i>	3	1	2				1	2			9
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>		1									1
California Black-Headed Snake	<i>Tantilla planiceps</i>			1		1	3					5
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>	1		2			2					5
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>											
Number of Individuals		37	145	139	94	71	163	130	134	102	121	1150
Number of Species		10	11	14	7	9	10	11	11	12	11	22

Site Name:	Rawson Canyon					
County:	Riverside					
Responsible Parties:	Southwest Riverside County Multi Species Reserve.					
Contact:	Eddie Kono					
Phone:	(909)767-0904					
<p>Description: Elevation 543-686 meters. The Rawson Canyon site is large and continuous with the San Janice Mountains. The area had burned in 1993 although there are some patches of unburned chamise chaparral. The habitat before the fire was chaparral and coastal sage scrub, with some oak woodland. The habitat now has exotic grasses, but the scrub is growing back. The site is relatively undisturbed and is part of the Southwest Riverside County Multi Species Reserve. The research arrays cover nearly 260 hectares.</p>						
Start dates for Sample Periods:						
	9/12/95	1/9/96	2/19/97	1/28/98	4/7/99	
	11/14/95	3/12/96	4/22/97	3/31/98	6/2/99	
		5/14/96	6/24/97	6/2/98	8/10/99	
		7/16/96	9/3/97	8/3/98	10/26/99	
		9/18/96	10/28/97	10/5/98		
		11/18/96		12/8/98		
Number of Sample Days: 230						
Location:						
Array	Lat. (N)	Lon. (W)	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33°38'10.66"	117°00'07.52"	33.6362944	117.0020888	686	NAD 83
2	33°38'12.86"	117°00'07.90"	33.6369056	117.0021944	677	NAD 83
3	33°37'48.99"	117°00'15.29"	33.6302750	117.0042472	655	NAD 83
4	33°37'47.68"	117°00'18.85"	33.6299111	117.0052361	661	NAD 83
5	33°37'53.50"	117°00'23.74"	33.6315278	117.0065944	649	NAD 83
6	33°37'52.68"	117°00'28.78"	33.6313000	117.0079944	647	NAD 83
7	33°37'51.72"	117°00'31.18"	33.6310333	117.0086611	655	NAD 83
8	33°37'21.44"	117°01'11.92"	33.6226222	117.0199777	546	NAD 83
9	33°37'19.29"	117°01'06.46"	33.6220250	117.0184611	551	NAD 83
10	33°37'13.41"	117°01'09.76"	33.6203917	117.0193777	543	NAD 83

Rawson Canyon



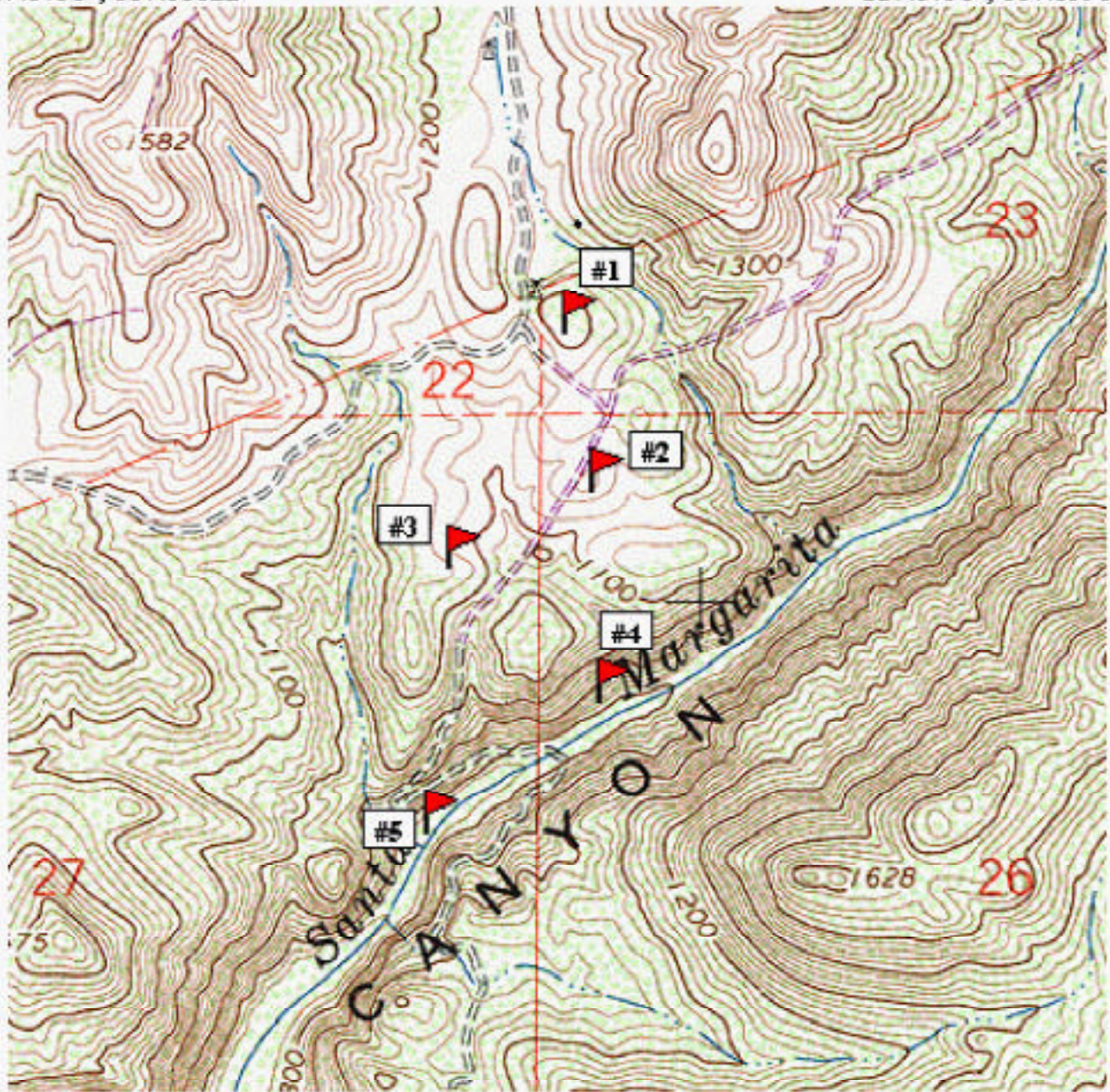
Site: Rawson Canyon	Total 23 Sample Periods	Array Number										
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>											
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>				2	1	4		2	14	9	32
Western Toad	<i>Bufo boreas</i>	11	11	20	7	94	98	33	154	215	249	892
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>		1									1
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>		1	2	1				1	10	1	16
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>					3	2	7		3		15
Gilbert Skink	<i>Eumeces gilberti</i>									1	2	3
Western Skink	<i>Eumeces skiltonianus</i>	15	26	2		1	5	19	10	15	11	104
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	1									1	2
Western Whiptail	<i>Cnemidophorus tigris</i>	17	26	23	6	1		6	5	16	7	107
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>											
Western Fence Lizard	<i>Sceloporus occidentalis</i>	28	23	10	10	28	25	30	88	54	64	360
Granite Spiny Lizard	<i>Sceloporus orcutti</i>		1									1
Side-Blotched Lizard	<i>Uta stansburiana</i>	45	33	10	15			3	1	4	2	113
Coast Horned Lizard	<i>Phrynosoma coronatum</i>	4	11	15	20			1				51
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>		1	1					2			4
Rosy Boa	<i>Charina trivirgata</i>											
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>											
Night Snake	<i>Hypsiglena torquata</i>								1			1
California Kingsnake	<i>Lampropeltis getulus</i>	6	4			1		1		3		15
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>	6	3	2				1	1		1	15
Striped Racer	<i>Masticophis lateralis</i>	3		4	2		4	9	3	9	5	40
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>	1	1	5	3		1	3				16
Long-nosed Snake	<i>Rhinocheilus lecontei</i>	1		1								2
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>		1	2	1							4
California Black-Headed Snake	<i>Tantilla planiceps</i>		1		1							2
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>											
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>					1						1
	Number of Individuals	138	144	97	68	130	139	113	269	344	352	1798
	Number of Species	12	15	13	11	8	7	11	11	11	11	23

Site Name:	Santo Margarita Ecological Reserve			
County:	Riverside			
Responsible Party:	San Diego State University - Biological Field Stations			
Contact:	Sedra Shapiro			
Phone:	(619)594-0580			
Description: This site is continuous with the Santa Ana Mountains, and Camp Pendleton. The habitat we are sampling is coastal sate scrub and oak woodland along the river. This habitat is relatively undisturbed.				
Start dates for Sample Periods:				
	4/2/96	1/7/97	3/14/98	3/16/99
	6/4/96	3/11/97	5/12/98	6/2/99
	8/7/96	5/13/97	7/14/98	8/18/99
	10/8/96	7/15/97	9/15/98	9/8/99
		9/23/97	11/16/98	11/10/99
		11/17/97		
Number of Sample Days:	234			
Location:				
Array	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum
1	33.4625726	117.1699384	1198	NAD83
2	33.4602496	117.1696256	1144	NAD83
3	33.4589179	117.1720414	1125	NAD83
4	33.4569168	117.1692784	787.9	NAD83
5	33.4550634	117.1729648	786.5	NAD83

SMER-NORTH

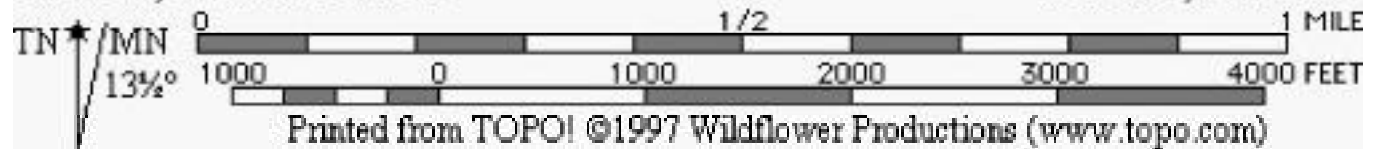
33.46756°, 117.18022°

33.46756°, 117.15982°



33.45083°, 117.18022° NAD83

33.45083°, 117.15982°



Site: Santa Margarita Eco. Reserve	Total 20 Sample Periods	Array Number					
Common Name	Scientific Name	1	2	3	4	5	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>						
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>	1			1	1	3
Arboreal Salamander	<i>Aneides lugubris</i>						
Monterey Salamander	<i>Ensatina escholtzi</i>						
Large-Blotched Salamander	<i>E. escholtzi klauberina</i>						
California Newt	<i>Taricha torosa</i>						
California Treefrog	<i>Hyla cadaverina</i>				2		2
Pacific Treefrog	<i>Hyla regilla</i>	1	1			2	4
Western Toad	<i>Bufo boreas</i>	2	1	1			4
Arroyo Toad	<i>Bufo microscaphus</i>						
Red-Spotted Toad	<i>Bufo punctatus</i>						
Red-Legged Frog	<i>Rana aurora</i>						
Bullfrog	<i>Rana catesbeiana</i>						
African Clawed Frog	<i>Xenopus laevis</i>						
Western Spadefoot Toad	<i>Spea hammondi</i>		6		1		7
Western Pond Turtle	<i>Clemmys marmorata</i>				4		4
Slider	<i>Trachemys sp.</i>						
Western Banded Gecko	<i>Coleonyx variegatus</i>						
Granite Night Lizard	<i>Xantusia henshawi</i>						
Desert Night Lizard	<i>Xantusia vigilis</i>						
California Legless Lizard	<i>Anniella pulchra</i>						
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	12	11	7	10	5	45
Gilbert Skink	<i>Eumeces gilberti</i>	6	1		2		9
Western Skink	<i>Eumeces skiltonianus</i>	6	3	1			10
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>	11	15	14	19	8	67
Western Whiptail	<i>Cnemidophorus tigris</i>	6	16	4	2	3	31
Desert Spiny Lizard	<i>Sceloporus magister</i>						
Sagebrush Lizard	<i>Sceloporus graciosus</i>						
Western Fence Lizard	<i>Sceloporus occidentalis</i>	5	12	12	11	9	49
Granite Spiny Lizard	<i>Sceloporus orcutti</i>				2	1	3
Side-Blotched Lizard	<i>Uta stansburiana</i>		2				2
Coast Horned Lizard	<i>Phrynosoma coronatum</i>						
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>						
Western Blind Snake	<i>Leptotyphlops humilis</i>						
Rosy Boa	<i>Charina trivirgata</i>						
Glossy Snake	<i>Arizona elegans</i>						
Yellow-Bellied Racer	<i>Coluber constrictor</i>						
Western Ringneck Snake	<i>Diadophis punctatus</i>		2	4		1	7
Night Snake	<i>Hypsiglena torquata</i>				1		1
California Kingsnake	<i>Lampropeltis getulus</i>						
California Mountain Kingsnake	<i>Lampropeltis zonata</i>						
Coachwhip/Red Racer	<i>Masticophis flagellum</i>		1	1			2
Striped Racer	<i>Masticophis lateralis</i>	1	3	2			6
San Diego Gopher Snake	<i>Pituophis melanoleucas</i>			3		3	6
Long-nosed Snake	<i>Rhinocheilus lecontei</i>						
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>			1			1
California Black-Headed Snake	<i>Tantilla planiceps</i>						
Two-striped Garter Snake	<i>Thamnophis hammondi</i>				6		6
Common Garter Snake	<i>Thamnophis sirtalis</i>						
Lyre Snake	<i>Trimorphodon biscutatus</i>						
Speckled Rattlesnake	<i>Crotalus mitchellii</i>		1				1
Red Diamond Rattlesnake	<i>Crotalus ruber</i>	2					2
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>	2		1		1	4
Number of Individuals		55	75	51	61	34	276
Number of Species		12	14	12	12	10	24

[illegible]

34.30041°N, 116.94897°W

Big Bear Lake

34.30041°N, 116.94897°W



34.25715°N, 116.94897°W

78° 34' 12"



34.25715°N, 116.94897°W

Site: Big Bear	Total 5 Sample Periods	Array Number										
Common Name	Scientific Name	1	2	3	4	5	6	7	8	9	10	Total
Black-bellied Slender Salamander	<i>Batrachoseps nigriventris</i>											
Pacific Slender Salamander	<i>Batrachoseps pacificus</i>											
Arboreal Salamander	<i>Aneides lugubris</i>											
Monterey Salamander	<i>Ensatina eschscholtzi</i>											
Large-Blotched Salamander	<i>Ensatina klauberi</i>											
California Newt	<i>Taricha torosa</i>											
California Treefrog	<i>Hyla cadaverina</i>											
Pacific Treefrog	<i>Hyla regilla</i>					1						1
Western Toad	<i>Bufo boreas</i>								1		1	2
Arroyo Toad	<i>Bufo microscaphus</i>											
Red-Spotted Toad	<i>Bufo punctatus</i>											
Red-Legged Frog	<i>Rana aurora</i>											
Bullfrog	<i>Rana catesbeiana</i>											
African Clawed Frog	<i>Xenopus laevis</i>											
Western Spadefoot Toad	<i>Spea hammondi</i>											
Western Pond Turtle	<i>Clemmys marmorata</i>											
Slider	<i>Trachemys sp.</i>											
Western Banded Gecko	<i>Coleonyx variegatus</i>											
Granite Night Lizard	<i>Xantusia henshawi</i>											
Desert Night Lizard	<i>Xantusia vigilis</i>											
California Legless Lizard	<i>Anniella pulchra</i>											
Southern Alligator Lizard	<i>Elgaria multicarinatus</i>	4	2						1	3	2	12
Gilbert Skink	<i>Eumeces gilberti</i>											
Western Skink	<i>Eumeces skiltonianus</i>	37	26	11	7	2	4	1	10	17	7	122
Coastal Western Whiptail	<i>Cnemidophorus hyperythrus</i>											
Western Whiptail	<i>Cnemidophorus tigris</i>											
Desert Spiny Lizard	<i>Sceloporus magister</i>											
Sagebrush Lizard	<i>Sceloporus graciosus</i>	18	27	4	7	9	25	16	11	7	8	132
Western Fence Lizard	<i>Sceloporus occidentalis</i>	8	15	4	1	3	9	2	8	15	2	67
Granite Spiny Lizard	<i>Sceloporus orcutti</i>											
Side-Blotched Lizard	<i>Uta stansburiana</i>											
Coast Horned Lizard	<i>Phrynosoma coronatum</i>											
Long-Nosed Leopard Lizard	<i>Gambelia wislizenii</i>											
Western Blind Snake	<i>Leptotyphlops humilis</i>											
Rosy Boa	<i>Charina trivirgata</i>											
Glossy Snake	<i>Arizona elegans</i>											
Yellow-Bellied Racer	<i>Coluber constrictor</i>											
Western Ringneck Snake	<i>Diadophis punctatus</i>											
Night Snake	<i>Hypsiglena torquata</i>											
California Kingsnake	<i>Lampropeltis getulus</i>											
California Mountain Kingsnake	<i>Lampropeltis zonata</i>											
Coachwhip/Red Racer	<i>Masticophis flagellum</i>											
Striped Racer	<i>Masticophis lateralis</i>											
San Diego Gopher Snake	<i>Pituophis melanoleucus</i>											
Long-nosed Snake	<i>Rhinocheilus lecontei</i>											
Coast Patch-Nosed Snake	<i>Salvadora hexalepis</i>											
California Black-Headed Snake	<i>Tantilla planiceps</i>											
Two-striped Garter Snake	<i>Thamnophis hammondi</i>											
Common Garter Snake	<i>Thamnophis sirtalis</i>											
Lyre Snake	<i>Trimorphodon biscutatus</i>											
Speckled Rattlesnake	<i>Crotalus mitchelli</i>											
Red Diamond Rattlesnake	<i>Crotalus ruber</i>											
Southern Pacific Rattlesnake	<i>Crotalus viridis</i>											
	Number of Individuals	68	70	19	15	15	38	19	32	42	20	338
	Number of Species	4	4	3	3	4	3	3	5	4	5	6

Site Name:	Chino Hills				
County:	San Bernardino, Los Angeles, and Orange				
Responsible Parties:	State Parks				
Contact:	Geary Hund				
Phone:	(909)940-5617				
Description: Elevation 110 - 415 meters. The arrays at this study site are located in coastal sage scrub, chaparral, grassland, oak and walnut woodland, and wash areas. Several of the areas being sampled are near urban development, as well as a golf course. This site is part of the Whittier Hills Corridor Study.					
Start dates for Sample Periods:					
	6/3/98	1/20/99			
	8/4/98	3/30/99			
	10/6/98	6/15/99			
	12/9/98	9/8/99			
		11/16/99			
Number of Sample Days: 82					
Location:					
Array	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum	
1	33.8862164	117.6571776	114	NAD 83	
2	33.8869706	117.6565799	146	NAD 83	
3	33.8858978	117.6561024	144	NAD 83	
4	33.8849642	117.6694502	140	NAD 83	
5	33.8848445	117.6714212	126	NAD 83	
6	33.8836914	117.6709525	150	NAD 83	
7	33.9099952	117.7855465	352	NAD 83	
8	33.9109764	117.7882757	354	NAD 83	
9	33.9116218	117.7879728	355	NAD 83	
10	33.911943	117.7882114	358	NAD 83	
11	33.9112195	117.8009506	255	NAD 83	
12	33.9103783	117.8054601	283	NAD 83	
13	33.9090483	117.8056549	264	NAD 83	
14	33.9144359	117.8069309	172	NAD 83	
15	33.9135732	117.8082626	187	NAD 83	
16	33.9133561	117.8100191	179	NAD 83	
17	33.9393046	117.8160851	396	NAD 83	
18	33.9403828	117.8157007	402	NAD 83	
19	33.9422832	117.816063	411	NAD 83	

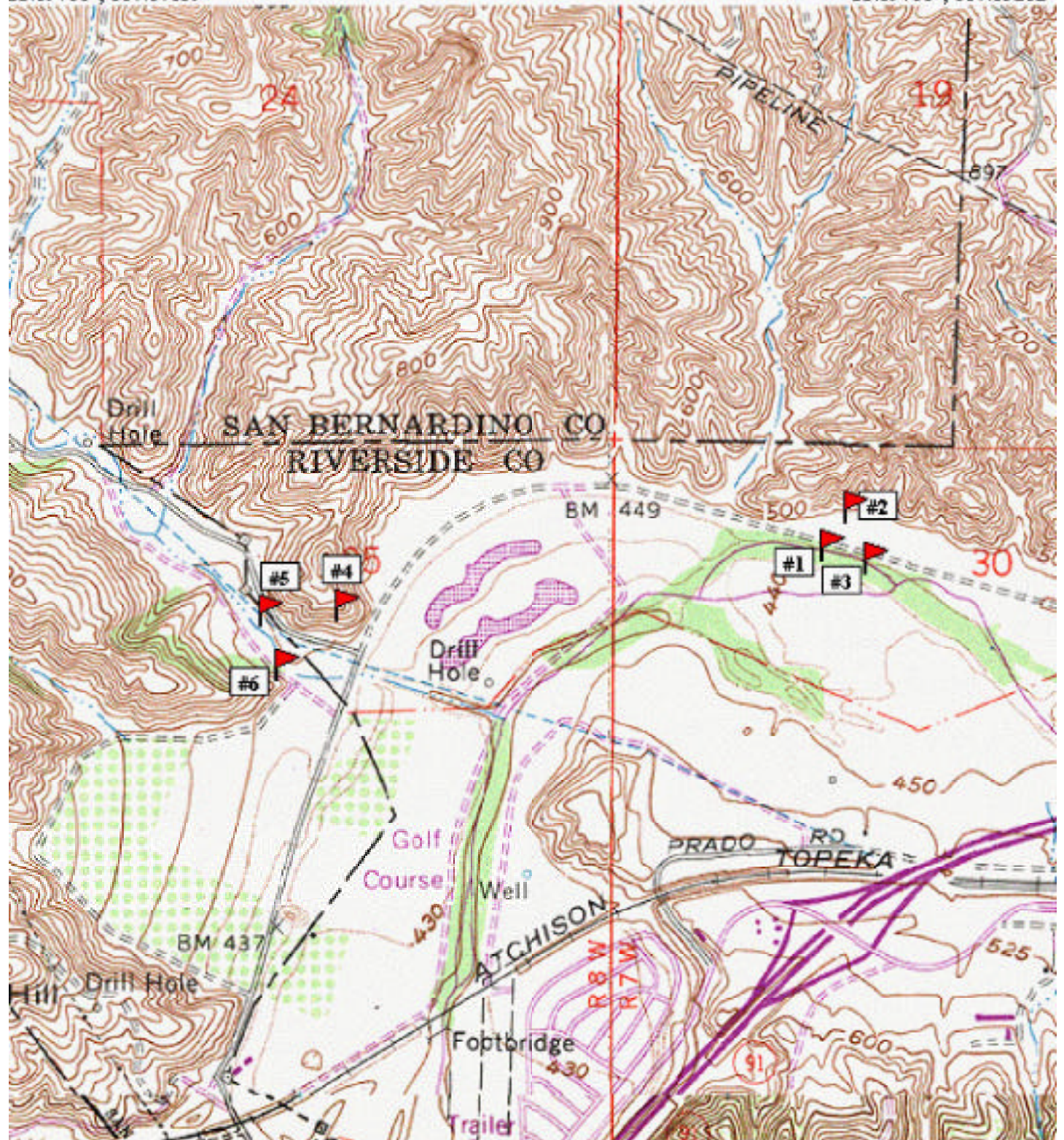
33.94473°, 117.80297°



Chino Hills - Golf Course Arrays

33.89780°, 117.67859°

33.89780°, 117.65212°



33.87398°, 117.67859° NAD83

33.87398°, 117.65212°

TN
MN
13 1/2°

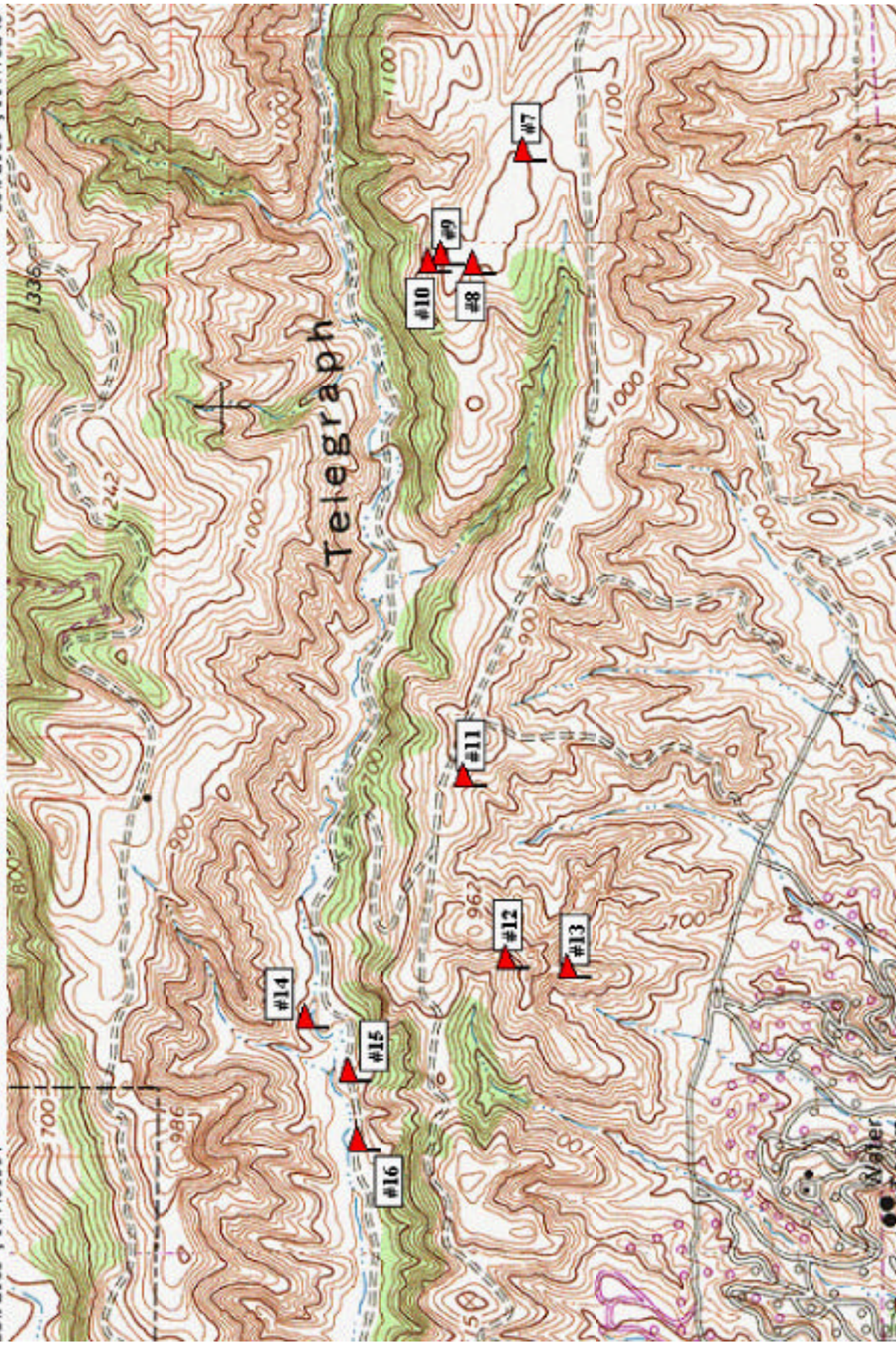
0 1000 0 1000 2000 3000 4000 FEET
1/2 1 MILE

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Chino Hills - Telegraph Canyon Arrays

33.92105°, 117.81557°

33.92105°, 117.78248°



33.90272°, 117.81557° NAD83

33.90272°, 117.78248°

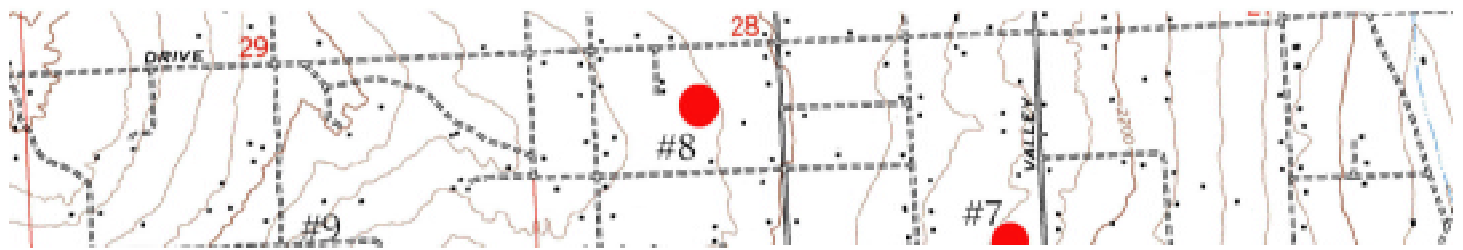


TN * MN
14°

Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

Site Name:	BLM Fragments				
County:	San Bernardino				
Responsible Parties:	BLM Barstow, CA				
Contact:	Tom Egan				
Phone:	760-252-6032				
Description: Elevation 680-800meters. The habitat in the BLM Fragment study site is made up mostly of creosote scrub and sand. Both dirt and paved roads divide the area. This site serves as a study of low levels of urbanization in a desert environment. All the desert research areas serve to study the biogeography across the elevation gradients from the Sonoran Desert to the Mojave Desert.					
Start dates for Sample Periods:					
	5/24/99				
	7/27/99				
	10/7/99				
	12/2/99				
Number of Sample Days: 40					
Location:					
Array	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum	
1	34.18129	116.14101	689	NAD 83	
2	34.18846	116.14129	686	NAD 83	
3	34.19494	116.14249	676	NAD 83	
4	34.20351	116.14042	680	NAD 83	
5	34.20660	116.14276	676	NAD 83	
6	34.20709	116.15103	677	NAD 83	
7	34.22413	116.14304	682	NAD 83	
8	34.22714	116.15315	708	NAD 83	
9	34.22306	116.16790	714	NAD 83	
10	34.23983	116.22953	798	NAD 83	

BLM Fragments, Arrays #1-9



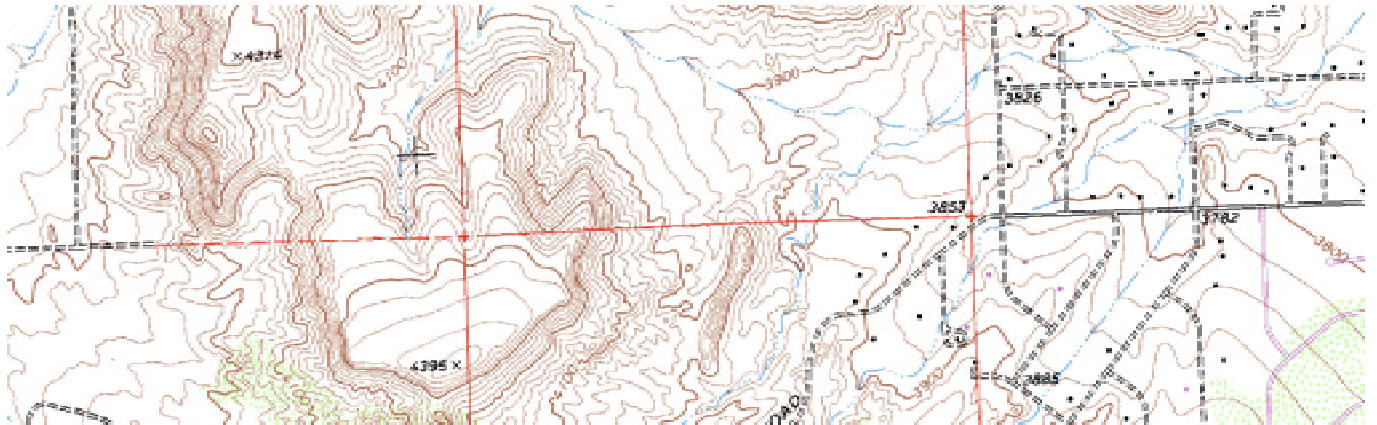
BLM Fragments, Arrays #9-10



[illegible]

[illegible]

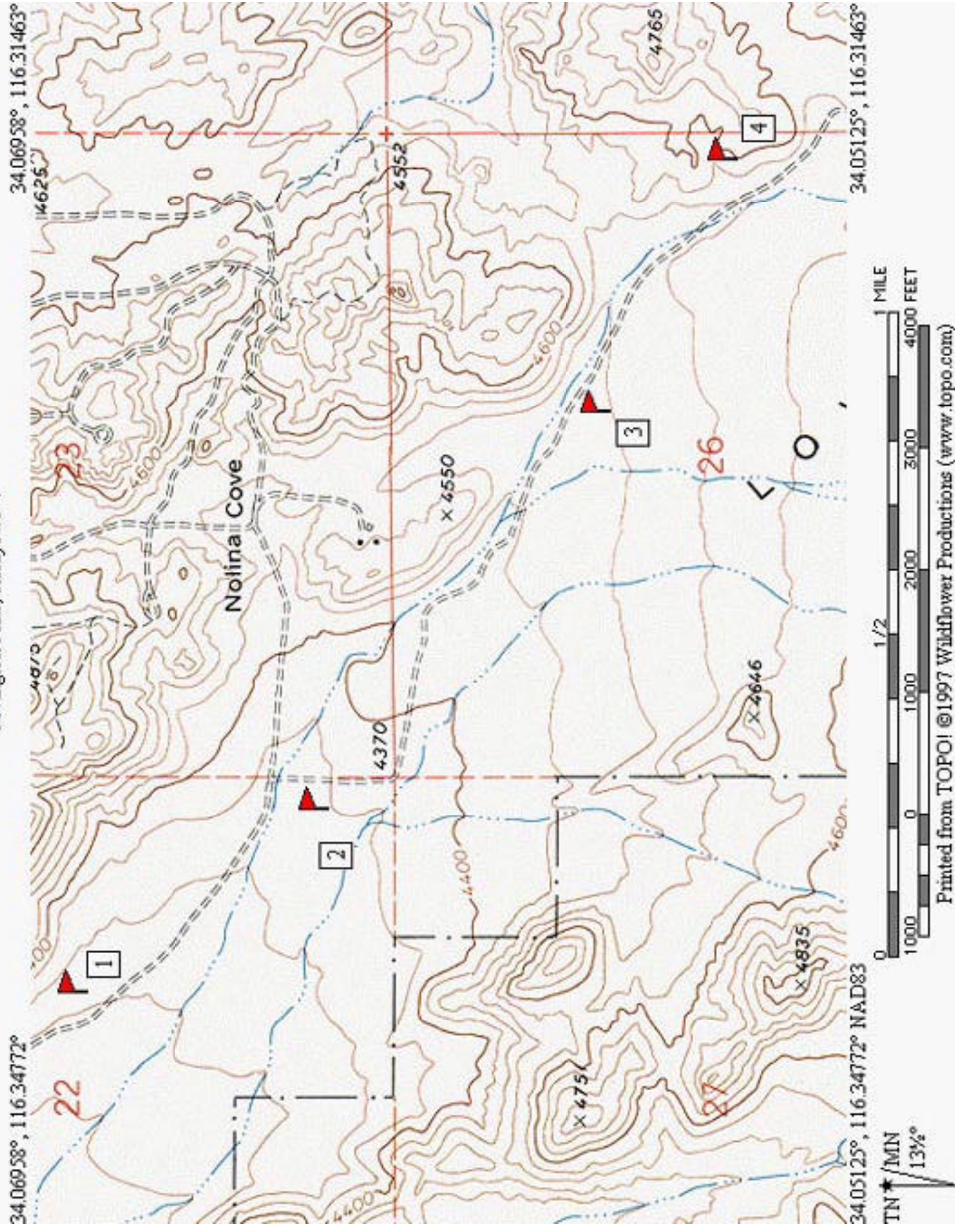
Burns Reserve

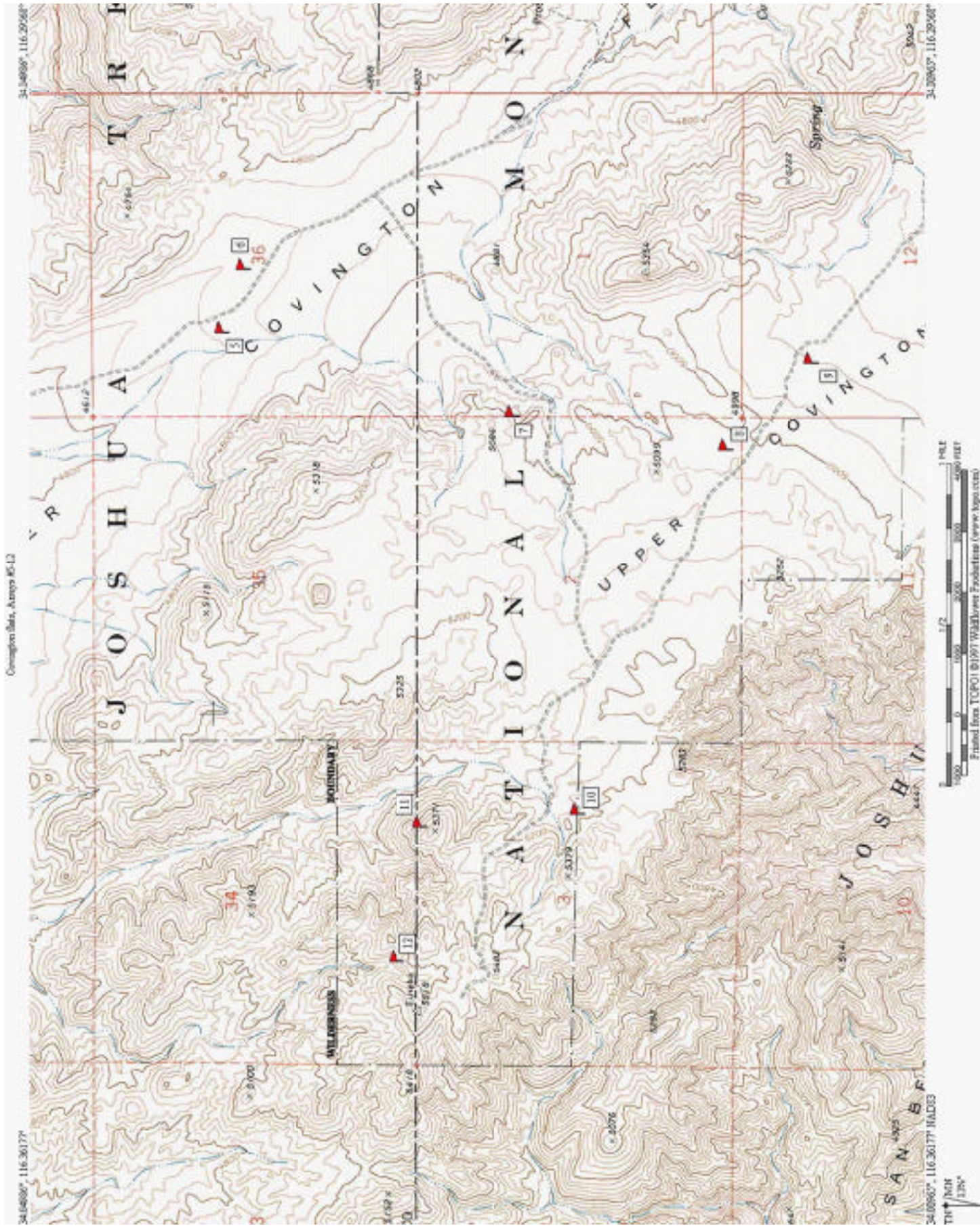


[illegible]

[illegible]

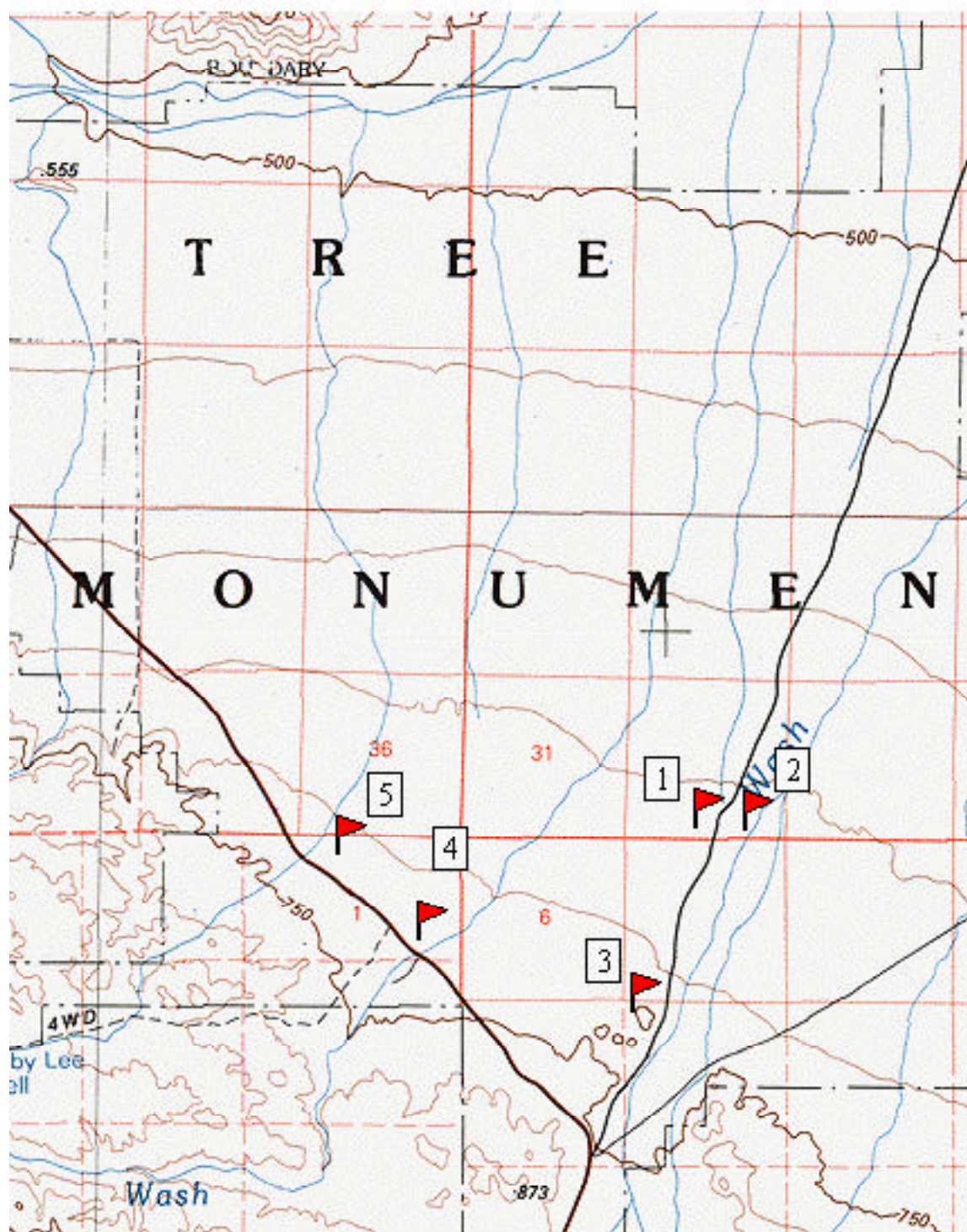
Covington Flats, Arrays #1-4

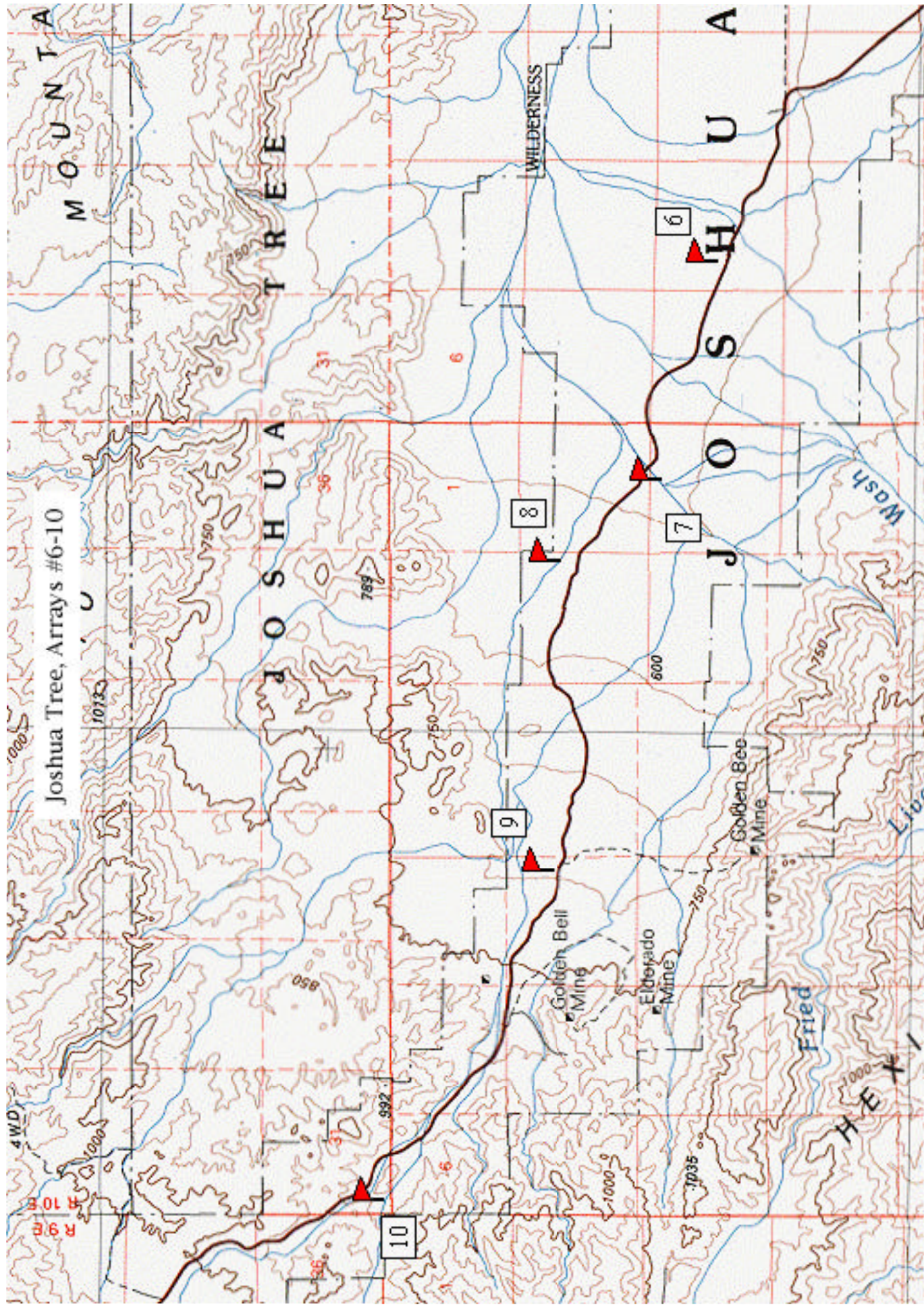




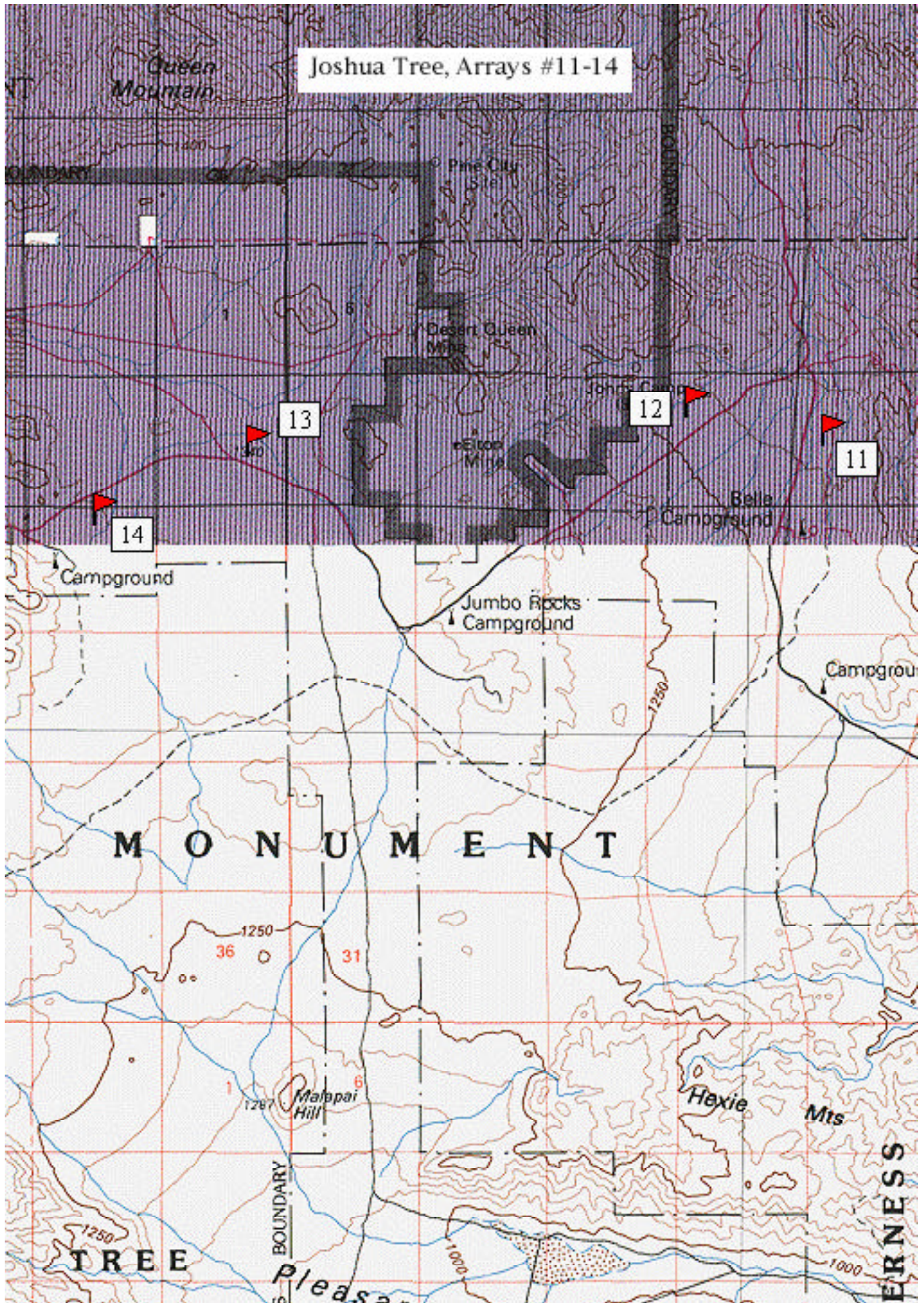
[illegible]

Joshua Tree, Arrays #1-5





Joshua Tree, Arrays #11-14



Joshua Tree, Arrays #15-19

19

18

17

36

31

6

1400

1200

1000

800

600

400

200

0

100

50

25

12.5

6.25

3.125

1.5625

0.78125

0.390625

0.1953125

0.09765625

0.048828125

0.0244140625

0.01220703125

0.006103515625

0.0030517578125

0.00152587890625

0.000762939453125

0.0003814697265625

0.00019073486328125

0.000095367431640625

0.0000476837158203125

0.00002384185791015625

0.000011920928955078125

0.0000059604644775390625

0.00000298023223876953125

0.000001490116119384765625

0.0000007450580596923828125

0.00000037252902984619140625

0.000000186264514923095703125

0.0000000931322574615478515625

0.00000004656612873077392578125

0.000000023283064365386962890625

0.0000000116415321826934814453125

0.00000000582076609134674072265625

0.000000002910383045673370361328125

0.0000000014551915228366851806640625

0.00000000072759576141834259033203125

0.000000000363797880709171295166015625

0.0000000001818989403545856475830078125

0.00000000009094947017729282379150390625

0.000000000045474735088646411895751953125

0.0000000000227373675443232059478759765625

0.00000000001136868377216160297393798828125

0.000000000005684341886080801486968994140625

0.0000000000028421709430404007434844970703125

0.00000000000142108547152020037174224853515625

0.000000000000710542735760100185871124267578125

0.0000000000003552713678800500929355621337890625

0.00000000000017763568394002504646778106689453125

0.000000000000088817841970012523233890533447265625

0.0000000000000444089209850062616169452667236328125

0.00000000000002220446049250313080847263336181640625

0.000000000000011102230246251565404236316680908203125

0.0000000000000055511151231257827021181583340541015625

0.00000000000000277555756156289135105907916702705078125

0.000000000000001387778780781445675529539583513525390625

0.0000000000000006938893903907228377647697917567626953125

0.00000000000000034694469519536141888238489587838134765625

0.000000000000000173472347597680709441192447939190673828125

0.0000000000000000867361737988403547205962239695953369140625

0.00000000000000004336808689942017736029811198479766845703125

0.000000000000000021684043449710088680149055992398834228515625

0.0000000000000000108420217248550443400745279961994171142578125

0.00000000000000000542101086242752217003726399809970855712890625

0.000000000000000002710505431213761085018631999049854278564453125

0.0000000000000000013552527156068805425093159995249271392822265625

0.00000000000000000067762635780344027125465799976246356964111328125

0.000000000000000000338813178901720135627328999881231784820556640625

0.0000000000000000001694065894508600678136644999406158924102783203125

0.00000000000000000008470329472543003390683224997030794620513916015625

0.000000000000000000042351647362715016953416124985153973102569580078125

0.0000000000000000000211758236813575084767080624925769865512847900390625

0.00000000000000000001058791184067875423835403124628849327564239501953125

0.000000000000000000005293955920339377119177015623144246637821197509765625

0.0000000000000000000026469779601696885595885078115721233189105987548828125

0.00000000000000000000132348898008484427979425390578606165945529937744140625

0.000000000000000000000661744490042422139897126952893030829727649688720703125

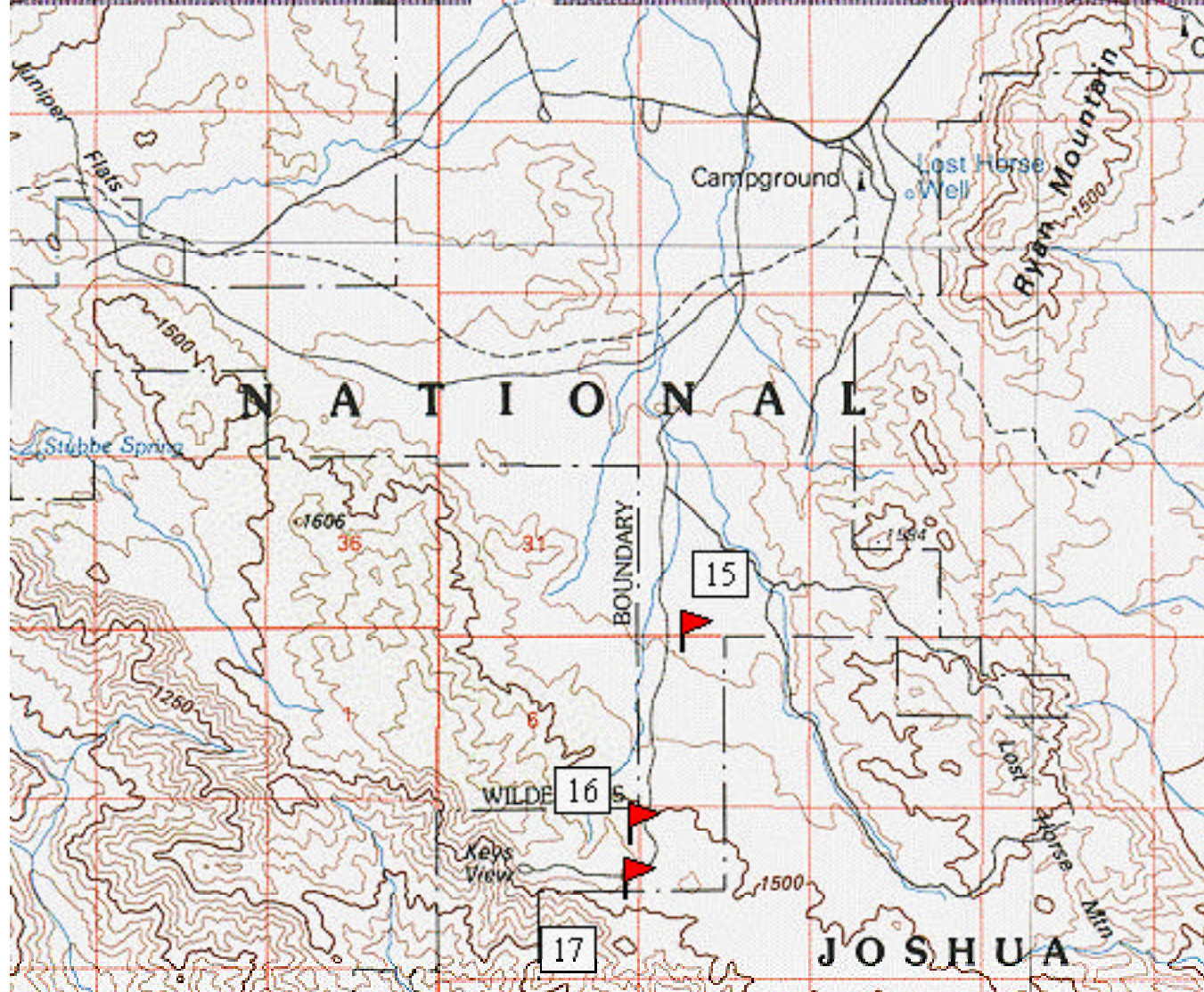
0.0000000000000000000003308722450212110699485634764465154148638248443603515625

0.00000000000000000000016543612251060553497428173822325770743191242218017578125

0.000000000000000000000082718061255302767487140869111628853715956211090087890625

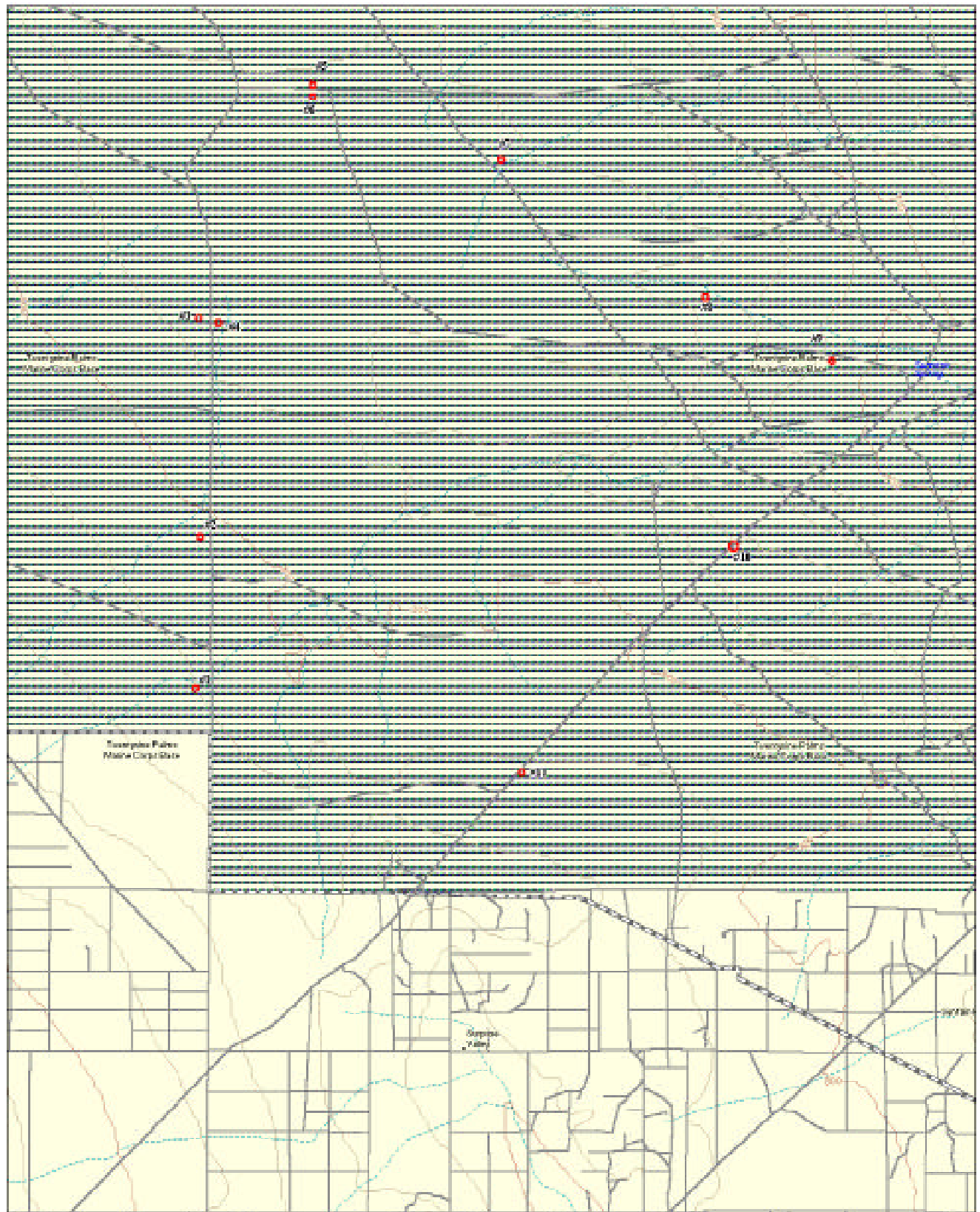
0.0000000000000000000000413590306276513837435704345558144268579781054500439453125

0.0000000000000000000000206795153138256



Site Name:	MCAGCC				
County:	San Bernardino				
Responsible Parties:	Department of Defense				
Contact:	Rhys Evans				
Phone:	(760)830-7883 ext234				
Description: Elevation 700 - 830 meters. This site has a history of military use. The habitat is creosote scrub with scattered Joshua Trees, along with sandy wash regions. All the desert research areas serve to study the biogeography across the elevation gradients from the Sonoran Desert to the Mojave Desert.					
Start dates for Sample Periods:					
	3/24/99				
	5/24/99				
	7/27/99				
	10/7/99				
	12/2/99				
Number of Sample Days: 50					
Location:					
Array	Lat. (N) dec.	Lon. (W) dec.	Elevation (m)	Datum	
1	34.2698141	116.3003796	821	NAD83	
2	34.2834883	116.2998770	804	NAD83	
3	34.3033335	116.3000485	773	NAD83	
4	34.3029118	116.2978616	772	NAD83	
5	34.3244889	116.2875795	764	NAD83	
6	34.3233708	116.2875932	765	NAD83	
7	34.3177053	116.2668881	764	NAD83	
8	34.3052416	116.2445010	751	NAD83	
9	34.2994415	116.2306701	714	NAD83	
10	34.2826463	116.2414258	760	NAD83	
11	34.2621589	116.2646470	824	NAD83	

MCAGCC



891 m

Topo USA 2.0 Copyright © 1999 DeLorme Yarmouth, ME 04096 Scale: 1 : 60,000 Detail: 12.0

[illegible]