

Plant List for the Vicinity Surrounding El Paso Wash

**Prepared by Creosote Ring Sub-Chapter, Bristlecone Chapter,
of the California Native Plant Society**

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April 17, 2010 Field Trip to Proposed Sites for Solar Power Plan
Proposed by Solar Millenium, near Ridgecrest, California

This area is west & east of El Paso Wash, and north and south of Brown Road.
Approximately Two Miles Northeast of the El Paso Wilderness Area
in the Indian Wells Valley, Mojave Desert, California

72 Species from 25 Plant Families were observed

**Plants Eaten by Desert
Tortoise**

*Numbers refer to the citations
below & indicate presence on
proposed sites of plants that
have been observed to be
eaten by the Desert Tortoise*

8 of top 10 observed
species of plants
preferred preferred
by adult by
tortoises in juvenile
Jennings' tortoises
study were in Oftedal
observed et. al

DICOTYLEDONAE		North Site	South Site	Henen	Jennings	Oftedal et al.
Asteraceae (Compositae)						
<i>Acamptopappus sphaerocephalus</i>	Goldenhead		✓			
<i>Ambrosia dumosa</i>	Bur-sage	✓	✓			
<i>Chaenactis fremontii</i>	Fremont's Pincushion	✓	✓			3
<i>Ericameria cooperi var. cooperi</i>	Cooper Goldenbush	✓				
<i>Eriophyllum pringlei</i>	Pringle's Eriophyllum		✓			
<i>Eriophyllum wallacei</i>	Wallace's Wooly Daisy		✓			3
<i>Filago depressa</i>	Dwarf Filago	✓				
<i>Glyptopleura marginata</i>	Keysia	✓				
<i>Hymenoclea salsola var. salsola</i>	Cheesebush	✓	✓			
<i>Lasthenia californica</i>	Goldfields	✓	✓			
<i>Lomatium mohavensis</i>	Mojave Wild Parsley		✓			
<i>Malacothrix coulteri</i>	Snake's Head	✓	✓			
<i>Malacothrix glabrata</i>	Desert Dandelion	✓	✓			3
<i>Stephanomeria pauciflora?</i>	Desert Straw		✓			
<i>Tetradymia axillaris</i>	Cottonthorn		✓			
<i>Xylorhiza tortifolia var. tortifolia</i>	Mojave Aster	✓				

Boraginaceae						
<i>Amsinckia menziesii</i> var. <i>intermedia</i>	Fiddleneck	✓	✓			
<i>Cryptantha micrantha</i>	Purple-rooted Forget-me-not	✓				
<i>Cryptantha pterocarya</i>	Winged-Nut Forget-Me-Not		✓			
<i>Pectocarya platycarpa</i>	Broad-margin Combseed	✓	✓	1		
Brassicaceae						
<i>Brassica tournefortii</i>	Sahara Mustard		✓			
<i>Lepidium fremontii</i>	Desert Alyssum		✓			
<i>Lepidium</i> sp.	Peppergrass	✓	✓			3
<i>Tropidocarpum gracile</i>	Slender Keel-Fruit		✓			
Cactaceae						
<i>Opuntia echinocarpa</i> var. <i>echinocarpa</i>	Golden Cholla	✓	✓	1		
Chenopodiaceae						
<i>Grayia spinosa</i> *	Spiny Hop-Sage		✓			
<i>Krascheninnikovia lanata</i>	Winter Fat		✓			
Cucurbitaceae						
<i>Cucurbita palmata</i>	Coyote Melon		✓			
Cuscutaceae						
<i>Cuscuta denticulata</i>	Toothed Dodder		✓			
Euphorbiaceae						
<i>Chamaesyce albomarginata</i>	Rattlesnake Spurge	✓	✓		2	
Fabaceae						
<i>Astragalus acutirostris</i>	Beaked Rattle Weed		✓			
<i>Astragalus didymocarpus</i> var. <i>dispermus</i>	Twin-fruit Locoweed ?	✓	✓		2	
<i>Astragalus laynae</i>	Layne's Milk Vetch	✓			2	

<i>Lotus humistratus</i>	Hairy Lotus	✓	✓		2	
<i>Lupinus concinnus</i>	Bajada Lupine	✓	✓	1		
<i>Lupinus microcarpus v. horizontalis</i>	Chick Lupine		✓			
<i>Psoralea argophylla</i>	Indigo Bush	✓				
<i>Senna armata</i>	Desert Senna	✓	✓			
Geraniaceae						
<i>Erodium cicutarium</i>	Red-stemmed Filaree	✓	✓	1	2	3
Hydrophyllaceae						
<i>Nama demissum</i>	Purple Mat	✓				
<i>Phacelia distans</i>	Fern Phacelia		✓			
<i>Phacelia fremontii</i>	Fremont Phacelia	✓	✓			
<i>Phacelia tanacetifolia</i>	Lacy Phacelia	✓			2	
<i>Pholistoma membranaceum</i>	White Fiesta Flower	✓				
Lamiaceae						
<i>Salvia carduacea</i>	Thistle Sage	✓	✓			
<i>Salvia columbariae</i>	Chia	✓				
Loasaceae						
<i>Mentzelia albicaulis</i>	Little Blazing Star	✓	✓			
Malvaceae						
<i>Eremalche exilis</i>	White Mallow	✓	✓			
Nyctaginaceae						
<i>Mirabilis bigelovii var. retrorsa</i>	Wishbone Bush	✓	✓		2	3
Onagraceae						
<i>Camissonia campestris campestris</i>	Mojave Sun Cup	✓	✓			
<i>Camissonia claviformis claviformis</i>	Brown-eyed Primrose	✓	✓			3
<i>Camissonia palmeri</i>	Palmer's Primrose	✓				
Papaveraceae						
<i>Eschscholzia minutiflora minutiflora</i>	Small-flowered Poppy	✓	✓			
Polemoniaceae						
<i>Eriastrum eremicum</i>	Desert Woolly Stars?	✓				
<i>Gilia minor</i>	Little Gilia		✓			
<i>Gilia</i> sp. (at least 2 different)		✓	✓			

Polygonaceae						
<i>Chorizanthe brevicornu</i> var. <i>brevicornu</i>	Bristle Spine Flower	✓	✓		2	3
<i>Chorizanthe rigidula</i>	Rigid Chorizanthe		✓			
<i>Chorizanthe watsonii</i> ?	Watson Chorizanthe		✓			
<i>Eriogonum gracillimum</i>	Rose & White Buckwheat		✓			
<i>Eriogonum inflatum</i> var. <i>inflatum</i>	Desert Trumpet	✓	✓			3
<i>Eriogonum pusillum</i>	Yellow Turban		✓			
<i>Mucronea perfoliata</i>	Perfoliated Spineflower	✓				
<i>Oxytheca perfoliata</i>	Punctured Bract	✓	✓			
Portulacaceae						
<i>Calyptidium</i> sp.	Sand-cress	✓				
Solanaceae						
<i>Lycium andersonii</i>	Anderson Boxthorn		✓			
Zygophyllaceae						
<i>Larrea tridentata</i>	Creosote Bush	✓	✓			
MONOCOTYLEDONAE						
Liliaceae						
<i>Calochortus kennedyi kennedyi</i>	Desert Mariposa Lily	✓				
<i>Dichelostemma capitatum capitatum</i>	Blue Dicks	✓				
Poaceae						
<i>Bromus madritensis</i> var. <i>rubens</i>	Red Brome		✓			
<i>Schismus barbatus</i>	Mediterranean Sheep Grass		✓	1		3

References used for plant identification

Baldwin, et al. 2002 *The Jepson Desert Manual: Vascular Plants of Southeastern California*, University of California Press, Berkeley, CA.

Mackay, Pam. 2003. *Mojave Desert Wildflowers*. Falcon Press, Guilford, CT.

Journal Articles Regarding Plants Eaten by the Desert Tortoise

1. **Henen, Brian Thomas. 2002.** Energy and water balance, diet, and reproduction of female desert tortoises (*Gopherus agassizii*). *Chelonian Conservation and Biology*. 4(2): 319-329.

*Diet of female tortoises at Goffs, California, in study by Henen included *Lupinus concinnus*, which was very prevalent on Solar Millenium site.*

2. **Jennings, W. Bryan. 2002.** Diet selection by the desert tortoise in relation to the flowering phenology of ephemeral plants. *Chelonian Conservation and Biology*. 4(2): 353-358.

*Eight species of the Top 10 preferred species of plants in desert tortoise diets during Jennings' spring 1992 study at Desert Tortoise Natural Area are present at the proposed Solar Millenium site. *Lotus humistratus* which accounted for 29% of the bites observed by Jennings was very prevalent on the proposed site east of El Paso Wash.*

3. **Morafka, David J. 2002.** Selective spring foraging by juvenile desert tortoises (*Gopherus agassizii*) in the Mojave Desert: evidence of an adaptive nutritional strategy. *Chelonian Conservation and Biology*. 4(2): 341-352.

*Ten of sixteen species eaten by juvenile tortoises in Oftedal et al study are present at the proposed Solar Millenium site. Of these *Camissonia claviformis claviformis* which is present at this site accounted for 50% of all bites taken by juvenile tortoises, at 346.*

Mojave Ground Squirrels Diet

Leitner, F. and D.M. Leitner. 1990. Coso grazing enclosure monitoring study, Mojave ground squirrel study Coso Known Geothermal Resource Area, Major Findings 1988-1996. Final Report.

**Spiny hopsage was one of the most frequently consumed shrubs in study by Leitner and Leitner, 1998.*